



6085

STIC Search Report

EIC 1700

STIC Database Tracking Number: 144753

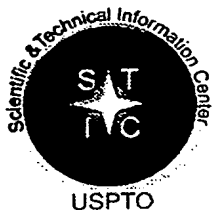
TO: Laura Weiner
Location: REM 6C83
Art Unit : 1795
February 9, 2005

Case Serial Number: 09/674541

From: Kathleen Fuller
Location: EIC 1700
REMSEN 4B28
Phone: 571/272-2505
Kathleen.Fuller@uspto.gov

Search Notes

There were 3,421 polymers which met the claim. In the CA file there were 421 CA references on compositions. I limited these with some additional utility and limited the answers to patents/references before 1999--49 references. Many of the answers are on molding compositions. The structures and the dates are good but I don't know if the molding part will do the trick for your. Let me know.



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher or contact:*

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1713

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



SEARCH REQUEST FORM

ACCESS UNIT 11111

Scientific and Technical Information Center

Requester's Full Name: Laura Weiner Examiner #: 71724 Date: 2-9-05
 Art Unit: 745 Phone Number 302-1294 Serial Number: 091674541
 Mail Box and Bldg/Room Location: 6023 Results Format Preferred (circle) PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Li Ion Battery

Inventors (please provide full names): Li Ion Battery

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Could you search for a polymer or copolymer of acrylate or methacrylate which has 2 reactive groups, the first is ben zophenone units & 2nd is dihydrodicyclopentadiene units. This polymer/copolymer would be used w/ at least one other component.

Thanks,
Laura

STAFF USE ONLY

| | Type of Search | Vendors and cost where applicable |
|--|------------------------|-----------------------------------|
| Searcher: <u>K. Fuller</u> | NA Sequence (#) _____ | STN <u>✓</u> |
| Searcher Phone #: _____ | AA Sequence (#) _____ | Dialog _____ |
| Searcher Location: _____ | Structure (#) <u>4</u> | Questel/Orbit _____ |
| Date Searcher Picked Up: _____ | Bibliographic _____ | Dr. Link _____ |
| Date Completed: <u>2/9/05</u> | Litigation _____ | Lexis/Nexis _____ |
| Searcher Prep & Review Time: <u>40</u> | Fulltext _____ | Sequence Systems _____ |
| Clerical Prep Time: _____ | Patent Family _____ | WWW/Internet _____ |
| Online Time: <u>48</u> | Other _____ | Other (specify) _____ |

=> FILE REG
FILE 'REGISTRY' ENTERED AT 15:06:43 ON 09 FEB 2005
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 8 FEB 2005 HIGHEST RN 827572-71-4
DICTIONARY FILE UPDATES: 8 FEB 2005 HIGHEST RN 827572-71-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> FILE HCAPLU
FILE 'HCAPLUS' ENTERED AT 15:06:51 ON 09 FEB 2005
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FILE COVERS 1907 - 9 Feb 2005 VOL 142 ISS 7
FILE LAST UPDATED: 8 Feb 2005 (20050208/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

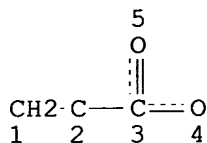
=> D QUE
L2

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11126-15-1/BI OR 12017-97-9/BI OR 12022-46-7/BI OR 12031-65-1/B
I OR 12190-79-3/BI OR 12680-08-9/BI OR 131344-56-4/BI OR
1314-13-2/BI OR 1314-35-8/BI OR 1314-62-1/BI OR 1332-29-2/BI
OR 13463-67-7/BI OR 13983-17-0/BI OR 146509-31-1/BI OR
152991-98-5/BI OR 153327-00-5/BI OR 159967-11-0/BI OR 177997-13
-6/BI OR 178961-04-1/BI OR 182442-95-1/BI OR 24937-79-9/BI OR
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-5/BI OR 3486-35-9/BI OR 37296-91-6/BI OR 37349-20-5/BI OR
37367-96-7/BI OR 39302-37-9/BI OR 39457-42-6/BI OR 51177-06-1/B

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

I OR 51680-57-0/BI OR 56321-19-8/BI OR 61673-68-5/BI OR
 61673-71-0/BI OR 67542-73-8/BI OR 71043-01-1/BI OR 74245-06-0/B
 I OR 7439-93-2/BI OR 76214-28-3/BI OR 7782-42-5/BI OR 80341-49-
 7/BI OR 9002-84-0/BI OR 9002-88-4/BI OR 9003-07-0/BI OR
 9003-53-6/BI OR 96352-80-6/BI)

L3 7 SEA FILE=REGISTRY ABB=ON L2 AND PMS/CI
 L5 STR ;

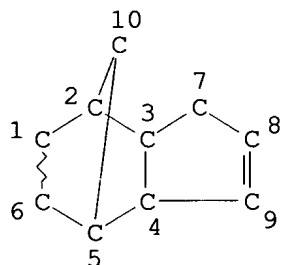


acrylate portion of the polymer

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE
 L7 STR 2

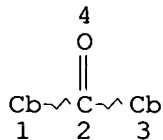


bicyclopentadiene portion

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
 L8 STR 3



benzophenone portion

NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 GGCAT IS UNS AT 1
 GGCAT IS UNS AT 3
 DEFAULT ECLEVEL IS LIMITED

*3421 polymers from
 structure 1 and (structure 2 or
 structure 3)*

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L10 SCR 2043
L12 3421 SEA FILE=REGISTRY SSS FUL L5 AND (L7 OR L8) AND L10
L14 2251 SEA FILE=HCAPLUS ABB=ON L12
L15 421 SEA FILE=HCAPLUS ABB=ON L14 (L) (COMPNS OR COMPOSITION?)
L16 5 SEA FILE=HCAPLUS ABB=ON L15 AND ELECTROCHEM?/SC, SX
L18 249 SEA FILE=HCAPLUS ABB=ON L15 AND PLASTIC?/SC, SX
L19 251 SEA FILE=HCAPLUS ABB=ON L16 OR L18
L20 1 SEA FILE=HCAPLUS ABB=ON L15 AND ELECTRO? (2A) CELL#
L21 3 SEA FILE=HCAPLUS ABB=ON L15 AND ELECTROCHEM?
L22 253 SEA FILE=HCAPLUS ABB=ON (L19 OR L20 OR L21)
L23 251 SEA FILE=HCAPLUS ABB=ON L22 AND P/DT
L24 159 SEA FILE=HCAPLUS ABB=ON L23 AND (1907-1998)/PRY, AP
L25 2 SEA FILE=HCAPLUS ABB=ON L22 NOT L23
L26 45 SEA FILE=HCAPLUS ABB=ON L24 AND (OXIDE? OR ?PHOSPHATE? OR
?SILICATE? OR ?SULFATE? OR ?CARBONATE? OR ?NITRIDE?)
L27 2 SEA FILE=HCAPLUS ABB=ON L24 AND (LI OR LITHIUM)
L28 43 SEA FILE=REGISTRY ABB=ON L2 NOT L3
L29 398185 SEA FILE=HCAPLUS ABB=ON L28
L30 4 SEA FILE=HCAPLUS ABB=ON L24 AND L29
L31 47 SEA FILE=HCAPLUS ABB=ON (L25 OR L26 OR L27) OR L30
L32 4 SEA FILE=HCAPLUS ABB=ON L24 AND (BATTER? OR ANODE? OR
CATHODE? OR ELECTRODE? OR SENSOR? OR DISPLAY OR CAPACITOR? OR
SEPARATOR?)
L33 1 SEA FILE=HCAPLUS ABB=ON L24 AND ?CONDUCT? (2A) FILM#
L34 1 SEA FILE=HCAPLUS ABB=ON L24 AND WINDOW#
L36 2 SEA FILE=HCAPLUS ABB=ON L24 AND ELECTROLYTE?
L37 49 SEA FILE=HCAPLUS ABB=ON L31 OR (L32 OR L33 OR L34) OR L36

421 CA
references
with
Composi
limited to
1998 or
earlier

=> D L37 BIB ABS IND HITSTR 1-49

L37 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:421224 HCAPLUS
DN 133:59566
TI Thermoplastic molding compositions based on graft and block polymers
IN Guntherberg, Norbert; Wunsch, Josef; Ittemann, Peter; Knoll, Konrad;
Niessner, Norbert
PA Basf A.-G., Germany
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|--|----------|-----------------|--------------|
| PI | WO 2000036010 | A1 | 20000622 | WO 1999-EP10016 | 19991216 <-- |
| | W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, | | | |

| | |
|--|--|
| CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | |
| DE 19858141 A1 20000621 DE 1998-19858141 19981216 | |
| EP 1141122 A1 20011010 EP 1999-963561 19991216 <-- | |
| EP 1141122 B1 20040915 | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

| | |
|--|--|
| AT 276316 E 20041015 AT 1999-963561 19991216 <-- | |
| US 6579937 B1 20030617 US 2001-868516 20010618 <-- | |
| PRAI DE 1998-19858141 A 19981216 <-- | |
| WO 1999-EP10016 W 19991216 | |

AB The invention relates to thermoplastic molding compns. with improved processability and the use thereof in the production of films, shaped bodies and fibers, containing (A) 5-98 weight %, in relation to the overall weight of the molding materials, of at least one rubberlike graft copolymer, (B) 1-90 weight %, in relation to the overall weight of the molded material, of at least one other copolymer, (C) 1-70 weight %, in relation to (A), (B), (C) and optionally (D), of one rubber-elastic block copolymer made from at least one block CA forming a hard phase and comprising polymerized units consisting of vinyl aromatic monomers, in addition to an elastomer block CB/A forming a soft phase and containing a diene, (D) 0-300 weight %, in relation to the weight of

constituents (A) (C), of a **polycarbonate**, maleic anhydride (I)-styrene copolymer, styrene-imide-I copolymer, styrene-imide-acrylonitrile (II)-I copolymer, polymethacrylimides, or polymethacrylate, (E) 0-30 weight %, in relation to the overall weight of the molding materials, of usual additives and auxiliary processing agents. A typical blend contained II-styrene-grafted butadiene rubber 38, II-styrene copolymer 57, and triblock SBR 5 parts.

IC ICM C08L051-04
ICS C08L025-08; C08L053-02; C08L069-00

CC 37-6 (**Plastics** Manufacture and Processing)

ST thermoplastic molding graft block polymer blend; fiber thermoplastic graft block polymer blend; film thermoplastic graft block polymer blend; polymethacrylate blend graft block polymer thermoplastic; polymethacrylimide blend graft block polymer thermoplastic; acrylonitrile copolymer blend graft block polymer thermoplastic; maleic anhydride copolymer blend graft block polymer thermoplastic; ABS graft polymer acrylonitrile styrene copolymer triblock SBR blend; **polycarbonate** blend graft block polymer thermoplastic

IT Styrene-butadiene rubber, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(block, triblock; thermoplastic molding compns. with improved processability based on graft and block polymers)

IT Impact-resistant materials
Plastic films
(thermoplastic molding compns. with improved processability based on graft and block polymers)

IT Synthetic polymeric fibers, miscellaneous
RL: MSC (Miscellaneous)
(thermoplastic molding compns. with improved processability based on graft and block polymers)

IT **Polycarbonates**, uses
RL: POF (Polymer in formulation); USES (Uses)
(thermoplastic molding compns. with improved processability based on graft and block polymers)

IT Molded plastics, properties
RL: PRP (Properties)
(thermoplastic molding compns. with improved processability based on

graft and block polymers)

IT Polymer blends
 RL: PRP (Properties)
 (thermoplastic molding compns. with improved processability based on
 graft and block polymers)

IT 106107-54-4 694491-73-1
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (styrene-butadiene rubber, block, triblock; thermoplastic molding
 compns. with improved processability based on graft and block polymers)

IT 9003-54-7, Acrylonitrile-styrene copolymer 106677-58-1, ABS graft
 polymer 106901-71-7, Acrylonitrile-butadiene-butyl acrylate-styrene
 graft copolymer **106912-44-1**, Acrylonitrile-butyl
 acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (thermoplastic molding **compns.** with improved processability
 based on graft and block polymers)

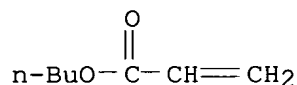
IT **106912-44-1**, Acrylonitrile-butyl acrylate-
 dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (thermoplastic molding **compns.** with improved processability
 based on graft and block polymers)

RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



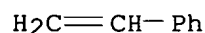
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8

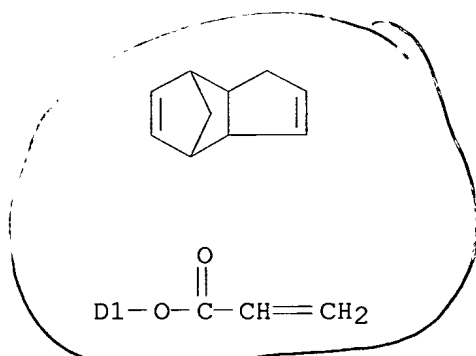


CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:376939 HCAPLUS

DN 133:18867

TI Primer compositions for improving adhesion of radical-curable coatings and bonding or coating method using them

IN Taguchi, Koichi; Sudo, Hiroshi

PA Denki Kagaku Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|-----------------|--------------|
| PI | JP 2000154336 | A2 | 20000606 | JP 1998-330696 | 19981120 <-- |
| PRAI | JP 1998-330696 | | 19981120 | <-- | |
| OS | MARPAT 133:18867 | | | | |

AB The comps. useful for metals contain acidic **phosphates** (RO)_nPO(OH)_{3-n} [R = H₂C:CR₁CO(OR₂)_m; R₁ = H, Me; R₂ = C₂H₄, C₃H₆, CH₂CHMe, C₄H₈, C₆H₁₂, C₂H₄OCOC₅H₁₀; m = 1-10; n = 1, 2] or their salts and acrylic monomers. Thus, a primer containing 1 part bis(methacryloyloxyethyl) **phosphate** and 99 parts 2-hydroxyethyl methacrylate and an acrylic adhesive were applied in this order on a stainless steel plate, cured, and aged at 23° and humidity 50% for 24 h to show peeling strength 12.2 kg/25 mm.

IC ICM C09D005-00

ICS C08J007-04; C09D004-02; C09J005-02; C08L033-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

ST acrylic primer acidic **phosphate** metal adhesion;

methacryloyloxyethyl **phosphate** acrylate primer metal adhesion

IT Nitrile rubber, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or

engineered material use); USES (Uses)
 (DN 612P, adhesive containing; primer compns. for improving adhesion of radical-curable coatings to metals)

IT Adhesion, physical
 Primers (paints)
 (primer compns. for improving adhesion of radical-curable coatings to metals)

IT 9010-94-0, Acrylonitrile-butadiene-methyl methacrylate-styrene copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (Denka BL 20, adhesive containing; primer compns. for improving adhesion of radical-curable coatings to metals)

IT **90386-40-6P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (adhesive containing; primer **compns.** for improving adhesion of radical-curable coatings to metals)

IT 9003-18-3
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (nitrile rubber, DN 612P, adhesive containing; primer compns. for improving adhesion of radical-curable coatings to metals)

IT 61778-41-4P, Bis(methacryloyloxyethyl) **phosphate**
 -trimethylolpropane trimethacrylate copolymer 61778-44-7P,
 Bis(methacryloyloxyethyl) **phosphate**-2-hydroxyethyl methacrylate copolymer 61778-50-5P, Bis(methacryloyloxyethyl) **phosphate**
 -tetraethylene glycol dimethacrylate copolymer 120881-18-7P
 206054-33-3P 273203-04-6P 273203-06-8P, Bis(methacryloyloxyethyl) **phosphate**-phenoxyethyl methacrylate copolymer 273203-08-0P,
 Bis(methacryloyloxyethyl) **phosphate**-4-methoxyphenoxyethyl acrylate copolymer 273203-10-4P 273203-12-6P,
 Bis(methacryloyloxyethyl) **phosphate**-tetrahydrofurfuryl methacrylate copolymer 273203-15-9P, Bis(methacryloyloxyethyl) **phosphate**-methoxypolyethylene glycol methacrylate copolymer
273207-81-1P 273207-82-2P 273207-83-3P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (primer **compns.** for improving adhesion of radical-curable coatings to metals)

IT 11109-50-5, SUS 304 12616-83-0
 RL: MSC (Miscellaneous)
 (substrate; primer compns. for improving adhesion of radical-curable coatings to metals)

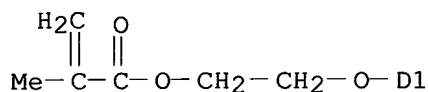
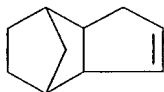
IT **90386-40-6P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (adhesive containing; primer **compns.** for improving adhesion of radical-curable coatings to metals)

RN 90386-40-6 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

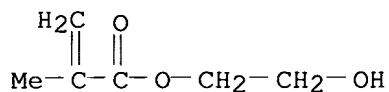
CRN 68169-03-9

CMF C16 H22 O3
CCI IDS



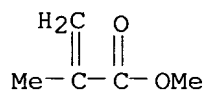
CM 2

CRN 868-77-9
CMF C6 H10 O3



CM 3

CRN 80-62-6
CMF C5 H8 O2



IT 273207-81-1P 273207-82-2P 273207-83-3P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

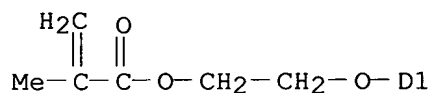
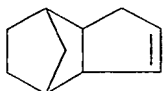
(primer **compns.** for improving adhesion of radical-curable coatings to metals)

RN 273207-81-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phosphinicobis(oxy-2,1-ethanediyl) ester, polymer with 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

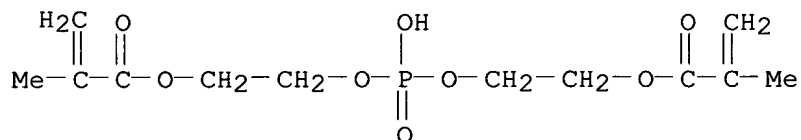
CRN 68169-03-9
CMF C16 H22 O3
CCI IDS



CM 2

CRN 32435-46-4

CMF C12 H19 O8 P



RN 273207-82-2 HCAPLUS

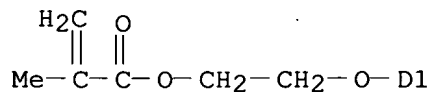
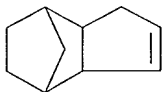
CN 2-Propenoic acid, 2-methyl-, phosphinicobis(oxy-2,1-ethanediyl) ester, polymer with 2-[[3a,4,5,5,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 68169-03-9

CMF C16 H22 O3

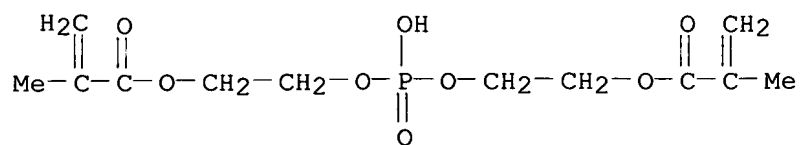
CCI IDS



CM 2

CRN 32435-46-4

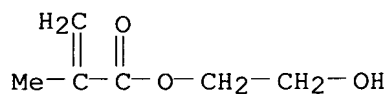
CMF C12 H19 O8 P



CM 3

CRN 868-77-9

CMF C6 H10 O3



RN 273207-83-3 HCAPLUS

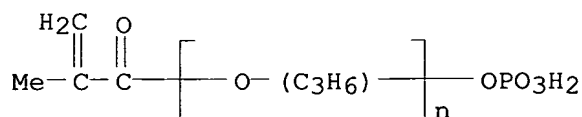
CN 2-Propenoic acid, 2-methyl-, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -(phosphonooxy)poly[oxy(methyl-1,2-ethanediyl)], graft (9CI) (CA INDEX NAME)

CM 1

CRN 95175-93-2

CMF (C3 H6 O)_n C4 H7 O5 P

CCI IDS, PMS

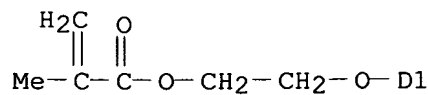
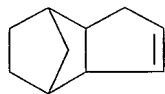


CM 2

CRN 68169-03-9

CMF C16 H22 O3

CCI IDS



L37 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:271941 HCAPLUS

DN 132:294554

TI Method for controlling the swell index and gel content and preparing an emulsion polymerized crosslinked acrylate rubber useful for manufacture impact-modified thermoplastic compositions and articles therefrom

IN Craig, Daniel Horace

PA General Electric Company, USA

SO U.S., 5 pp.

CODEN: USXXAM

DT **Patent**

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|--------------|-----------------|--------------|
| PI | US 6054531 | A | 20000425 | US 1998-197788 | 19981123 |
| | WO 2000031158 | A1 | 20000602 | WO 1999-US26974 | 19991112 <-- |
| | W: CN, JP, SG | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 1137680 | A1 | 20011004 | EP 1999-964986 | 19991112 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2002530494 | T2 | 20020917 | JP 2000-583981 | 19991112 <-- |
| PRAI | US 1998-197788 | A | 19981123 <-- | | |
| | WO 1999-US26974 | W | 19991112 | | |

AB The title method comprises reaction of a polymerizable acrylic acid ester, and a polyfunctional crosslinking monomer to produce a mono- or bimodal crosslinked poly(acrylate) rubber in the presence of an α -alkylstyrenic compound such as α -methylstyrene dimer, and results in control of the swell index without altering the gel content of the rubber. The polyfunctional crosslinking monomer is selected from dicyclopentenylxyethyl methacrylate, tricyclodecenyl acrylate and triallyl cyanurate. The impact strength of a thermoplastic composition is improved by incorporating the emulsion-polymerized crosslinked poly(acrylate) rubber grafted with styrene and acrylonitrile. A thermoplastic composition comprises a blend of at least one thermoplastic polymer such as **polycarbonate** or styrene-acrylonitrile copolymer, and 5-75 weight% of crosslinked polyacrylate rubber or graft thereof. Thus, 2156 g Bu acrylate, 42.5 g dicyclopentenylxyethyl methacrylate and 5 g α -methylstyrene dimer were emulsion polymerized at 80-85° to obtain crosslinked Bu acrylate rubber having volume average particle size Dv

651 nm, swell index 15.3, and gel content 84.5 weight%. Dry graft rubber 54, styrene/acrylonitrile (75/25) copolymer 46, and Irganox 1076 1 part were extruded and injection molded to obtain 27% rubber impact-modified thermoplastic material, having 50/50 bimodal particle size 128/651 nm, swell index of 128/651 nm poly(Bu acrylate) 11/15.3, and Izod impact strength at room temperature 5.9 ft-lb/in.

IC ICM C08G063-91

NCL 525064000

CC 37-3 (**Plastics** Manufacture and Processing)Section cross-reference(s): **38**, 39

ST dicyclopentenylxyethyl methacrylate crosslinker acrylate rubber; swelling gelation control crosslinked polyacrylate rubber; impact modified styrene acrylonitrile copolymer; weatherable thermoplastic compn impact modified

IT Synthetic rubber, preparation

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

- (Bu acrylate-dicyclopentenylxyethyl methacrylate-methylstyrene dimer; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Acrylic rubber
Synthetic rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylonitrile-Bu acrylate-dicyclopentenylxyethyl methacrylate-methylstyrene dimer-styrene, graft; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Acrylic rubber
Synthetic rubber, preparation
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(acrylonitrile-Bu acrylate-dicyclopentenylxyethyl methacrylate-styrene, graft; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Acrylic rubber
Polyamides, uses
Polycarbonates, uses
Polyoxyphenylenes
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Polymer blends
RL: TEM (Technical or engineered material use); USES (Uses)
(control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Electric apparatus
(outdoor housing for; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Polyesters, uses
Polyesters, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(**polycarbonate**-; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT **Polycarbonates**, uses
Polycarbonates, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyester-; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Polyimides, uses
Polyimides, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(polyether-; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)
- IT Polyethers, uses
Polyethers, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material

use); USES (Uses)
 (polyimide-; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT Communication
 (telecommunication, outdoor housing for interface devices; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT Plastics, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (thermoplastics; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT 9003-54-7, Acrylonitrile-styrene copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (blend with acrylate rubber; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT 9003-53-6, Polystyrene
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT **264890-44-0P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (rubber, blend with methylstyrene-containing acrylate rubber; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT **264890-42-8P 264890-43-9P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (rubber; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

IT **264890-44-0P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (rubber, blend with methylstyrene-containing acrylate rubber; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic compns.)

RN 264890-44-0 HCAPLUS

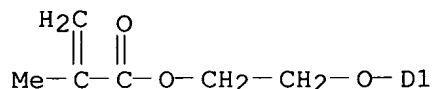
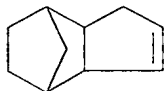
CN 2-Propenoic acid, 2-methyl-, 2-[[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

CM 1

CRN 68169-03-9

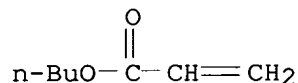
CMF C16 H22 O3

CCI IDS



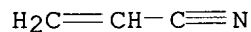
CM 2

CRN 141-32-2
CMF C7 H12 O2



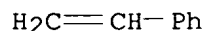
CM 3

CRN 107-13-1
CMF C3 H3 N



CM 4

CRN 100-42-5
CMF C8 H8



IT **264890-42-8P 264890-43-9P**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (rubber; control of swell index and gel content of emulsion-polymerized crosslinked poly(acrylate) rubber for preparing impact-modified thermoplastic **comps.**)

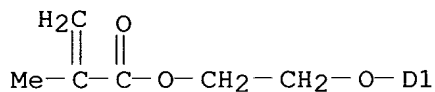
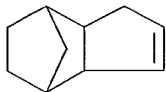
RN 264890-42-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with butyl 2-propenoate and (1-methylethenyl)benzene dimer (9CI) (CA INDEX NAME)

CM 1

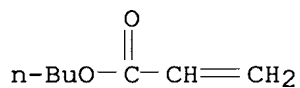
CRN 68169-03-9

CMF C16 H22 O3
CCI IDS



CM 2

CRN 141-32-2
CMF C7 H12 O2

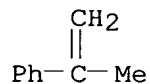


CM 3

CRN 6144-04-3
CMF (C9 H10)2
CCI PMS

CM 4

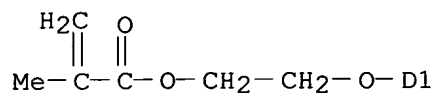
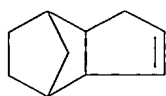
CRN 98-83-9
CMF C9 H10



RN 264890-43-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, (1-methylethenyl)benzene dimer and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

CM 1

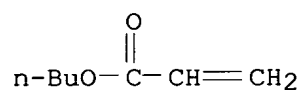
CRN 68169-03-9
CMF C16 H22 O3
CCI IDS



CM 2

CRN 141-32-2

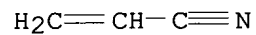
CMF C7 H12 O2



CM 3

CRN 107-13-1

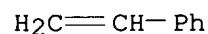
CMF C3 H3 N



CM 4

CRN 100-42-5

CMF C8 H8



CM 5

CRN 6144-04-3

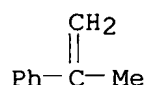
CMF (C9 H10)2

CCI PMS

CM 6

CRN 98-83-9

CMF C9 H10



RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:241379 HCAPLUS

DN 132:280169

TI Thermoplastic molding material for producing semi-finished products for body parts of vehicles

IN Weber, Martin; Gorrisen, Heiner; McKee, Graham Edmund; Niessner, Norbert; Guntherberg, Norbert

PA BASF Aktiengesellschaft, Germany

SO PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | WO 2000020511 | A1 | 20000413 | WO 1999-EP7502 | 19991006 <-- |
| | W: JP, KR, MX, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | DE 19846246 | A1 | 20000413 | DE 1998-19846246 | 19981007 |
| PRAI | DE 1998-19846246 | A | 19981007 | <-- | |
| AB | A swelling-resistant shaped thermoplastic material different from ABS is used for the manufacture of auto body parts, containing 1-48 weight% (based on A-E) of | | | | |
| | a single- or multiphase particulate emulsion polymer with a glass-transition temperature below 0° in ≥1 phase and a mean particle size of 50-1000 nm as component A; 1-48 weight% of ≥1 amorphous or semicryst. polymer as component B; 51-98 weight% of a polycarbonate as component C; 0-47 weight% conventional additives and/or fibrous and/or particulate fillers as component D; and 0-5 weight% of ≥1 low-mol.-weight halogen-free acid as component E. Thus, 60 parts conventional polycarbonate was melt blended with 30 parts 35:65 acrylonitrile-styrene copolymer and 10 parts acrylonitrile- and styrene-grafted 98:2 Bu acrylate-tricyclodecenyl acrylate copolymer particles in an extruder at 250-280° and formed into a test piece with better environmental stress cracking resistance and better resistance to swelling in MeOH or premium gasoline than an ABS- polycarbonate blend. | | | | |
| IC | ICM C08L069-00 | | | | |
| | ICS B62D039-00; B60R019-00; B60R027-00; C08K005-09; C08L069-00; C08L051-00; C08L101-00 | | | | |
| CC | 38-3 (Plastics Fabrication and Uses) | | | | |
| | Section cross-reference(s): 37 | | | | |
| ST | polycarbonate blend auto body part; graft copolymer blend | | | | |
| | polycarbonate | | | | |
| IT | Automobiles | | | | |
| | (parts; polycarbonate blend compns. for auto body parts) | | | | |
| IT | Chemically resistant materials | | | | |
| | (polycarbonate blend compns. for auto body parts) | | | | |
| IT | Polycarbonates , uses | | | | |

RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

IT Polymer blends
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

IT 106912-44-1P, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer
 in formulation); PREP (Preparation); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

IT 9003-54-7, Acrylonitrile-styrene copolymer
 RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

IT 77-92-9, Citric acid, uses 14807-96-6, Talc, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

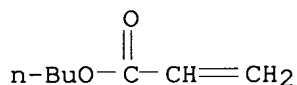
IT 106912-44-1P, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer
 in formulation); PREP (Preparation); USES (Uses)
 (polycarbonate blend compns. for auto body parts)

RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



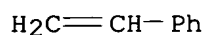
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8

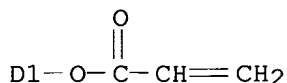
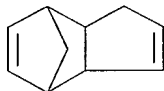


CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2000:241016 HCAPLUS
 DN 132:265912
 TI Thermoplastic molding compositions for use in outdoor toys
 IN Guntherberg, Norbert; Gorrissen, Heiner; Mc Kee, Graham Edmund; Niessner, Norbert; Weber, Martin
 PA BASF Aktiengesellschaft, Germany
 SO PCT Int. Appl., 51 pp.
 CODEN: PIXXD2

DT Patent
 LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|--------------|
| PI | WO 2000020084 | A1 | 20000413 | WO 1999-EP7207 | 19990929 <-- |
| | W: JP, KR, MX, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | DE 19846251 | A1 | 20000413 | DE 1998-19846251 | 19981007 |
| | EP 1123149 | A1 | 20010816 | EP 1999-970032 | 19990929 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRAI | DE 1998-19846251 | A | 19981007 | <-- | |
| | WO 1999-EP7207 | W | 19990929 | | |

AB The title compns., which resist chems., yellowing, and fire and are readily recycled, contain emulsion polymers [average particle size (D) 50-1000 nm, glass temperature <0°] 1-48, amorphous or partially crystalline polymers 1-48, **polycarbonates** 51-98, and conventional additives 0-47%. A blend of graft polymer [prepared by polymerizing 40 parts 3:1 styrene-acrylonitrile on 150 parts 40% latex (D 76 nm) of 98:2 Bu acrylate-tricyclodeceny acrylate copolymer] 5, graft polymer (as the preceding, but prepared with a latex with D 288 nm) 5, 65:35 SAN 30, and **polycarbonate** (viscosity number 61.5 mL/g) 60 parts had scratch

resistance (CSEM) 3.6 μ m, stress-cracking resistance (ISO 4599) -8%, and swelling in MeOH (96 h) 0.8%.

IC ICM A63H017-00
ICS C08L051-00; C08L051-04; C08L101-00; C08L025-00

CC 37-6 (**Plastics** Manufacture and Processing)
Section cross-reference(s): **38**

ST blend polymer outdoor toy; **polycarbonate** blend outdoor toy; graft polymer blend outdoor toy; acrylate graft polymer blend toy; acrylonitrile graft polymer blend toy; styrene graft polymer blend toy; SAN blend outdoor toy

IT Toys
(outdoor; thermoplastic molding compns. for use in outdoor toys)

IT **Polycarbonates**, uses
Polymer blends
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastic molding compns. for use in outdoor toys)

IT 9003-54-7 **113814-78-1**, Acrylonitrile-butyl acrylate-dicyclopentadienyl acrylate-styrene graft copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastic molding **compns.** for use in outdoor toys)

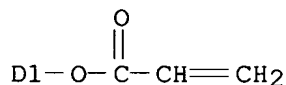
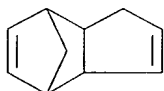
IT **113814-78-1**, Acrylonitrile-butyl acrylate-dicyclopentadienyl acrylate-styrene graft copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastic molding **compns.** for use in outdoor toys)

RN 113814-78-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

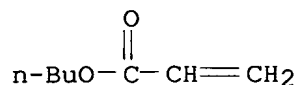
CM 1

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



CM 2

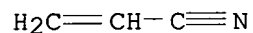
CRN 141-32-2
CMF C7 H12 O2



CM 3

CRN 107-13-1

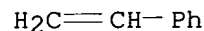
CMF C3 H3 N



CM 4

CRN 100-42-5

CMF C8 H8



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:139306 HCAPLUS

DN 132:167208

TI Radiation-sensitive resin composition for **display** panel spacer

IN Ogasawara, Shoji; Endo, Masayuki

PA JSR Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|------------------|--------------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | JP 2000063684 | A2 | 20000229 | JP 1998-233724 | 19980820 |
| | TW 468092 | B | 20011211 | TW 1999-88114046 | 19990817 <-- |
| | KR 2000017381 | A | 20000325 | KR 1999-34260 | 19990819 <-- |
| PRAI | JP 1998-233724 | A | 19980820 | <-- | |

OS MARPAT 132:167208

AB The composition, showing good rubbing resistance, heat dimensional stability and good retention of voltage, comprises an alkaline solubility resin, a melamine,

and a trihalomethyl tritriazine and/or onium salt. Thus, a spacer was prepared by apply a mixture of poly(hydroxystyrene) 100, Cymel 300 20, 2-(4-methoxy- β -styryl)-bis(4,6-trichloromethyl)-s-triazine 0.2, Epikote 152 10 and Megafac F 172 0.04 part in 3-ethoxypropionate solution (solid content 35%) on a glass plate, radiating under 10 m W/cm² UV-ray of 365 nm for 10 s, heating at 150°, treating in an aqueous solution of 2.38% tetramethylammonium hydroxide and curing at 200° for 60 min.

IC ICM C08L101-02

ICS C08K005-3492; C08K005-36; G02F001-1339; G03F007-029; G03F007-038

CC 37-6 (**Plastics** Manufacture and Processing)
 Section cross-reference(s): 74

ST radiation sensitive aminoplast polystyrene epoxy resin; **display**
 panel spacer trichloro triazine coating

IT Epoxy resins, preparation
 Epoxy resins, preparation
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (acrylic-aminoplast-; radiation-sensitive resin composition for
display panel spacer)

IT Aminoplasts
 Aminoplasts
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (acrylic-epoxy; radiation-sensitive resin composition for **display**
 panel spacer)

IT Acrylic polymers, preparation
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (aminoplast-epoxy; radiation-sensitive resin composition for **display**
 panel spacer)

IT Liquid crystal displays
 Radiation chemistry
 (radiation-sensitive resin composition for **display** panel spacer)

IT 259096-68-9P, 2,4,6-Triamino-s-triazine-formaldehyde-Epikote
 152-vinylphenol copolymer 259096-69-0P 259096-70-3P,
 2,4,6-Triamino-s-triazine-formaldehyde-bisphenol A-epichlorhydrin-
 vinylphenol copolymer 259096-71-4P, m-Cresol-p-cresol-2,4,6-Triamino-s-
 triazine-formaldehyde-Epikote 152-vinylphenol copolymer
259096-72-5P, 2,4,6-Triamino-s-triazine-formaldehyde-1,3-butadiene-
 dicyclopentadienyl methacrylate-Epikote 152-methacrylic acid-styrene
 copolymer **259096-73-6P**, 2,4,6-Triamino-s-triazine-formaldehyde-
 dicyclopentadienyl methacrylate-Epikote 152-glycidyl methacrylate-
 methacrylic acid-styrene copolymer 259096-74-7P, 2,4,6-Triamino-s-
 triazine-formaldehyde-diaminodiphenylmethane-Epikote 152-pyromellitic acid
 copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (radiation-sensitive resin **composition** for **display** panel
 spacer)

IT 42573-57-9
 RL: MOA (Modifier or additive use); USES (Uses)
 (radiation-sensitive resin composition for **display** panel spacer)

IT **259096-72-5P**, 2,4,6-Triamino-s-triazine-formaldehyde-1,3-butadiene-
 dicyclopentadienyl methacrylate-Epikote 152-methacrylic acid-styrene
 copolymer **259096-73-6P**, 2,4,6-Triamino-s-triazine-formaldehyde-
 dicyclopentadienyl methacrylate-Epikote 152-glycidyl methacrylate-
 methacrylic acid-styrene copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (radiation-sensitive resin **composition** for **display** panel
 spacer)

RN 259096-72-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, Epikote 152,
 ethenylbenzene, formaldehyde, 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-
 5(or 6)-yl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI)
 (CA INDEX NAME)

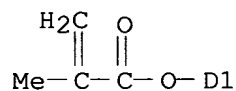
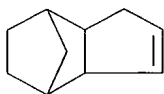
CM 1

CRN 84778-06-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

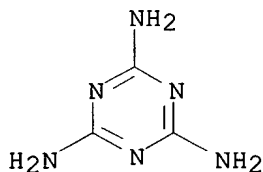
CM 2

CRN 31621-69-9
CMF C14 H18 O2
CCI IDS



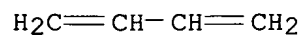
CM 3

CRN 108-78-1
CMF C3 H6 N6



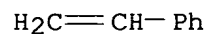
CM 4

CRN 106-99-0
CMF C4 H6



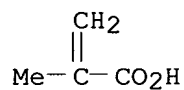
CM 5

CRN 100-42-5
CMF C8 H8



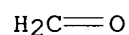
CM 6

CRN 79-41-4
CMF C4 H6 O2



CM 7

CRN 50-00-0
CMF C H2 O



RN 259096-73-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, polymer with Epikote 152, ethenylbenzene, formaldehyde, 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

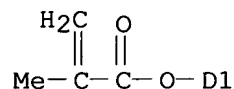
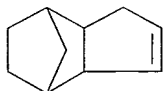
CM 1

CRN 84778-06-3
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

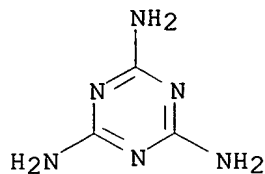
CRN 31621-69-9
CMF C14 H18 O2
CCI IDS



CM 3

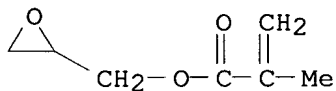
CRN 108-78-1

CMF C3 H6 N6



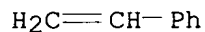
CM 4

CRN 106-91-2
CMF C7 H10 O3



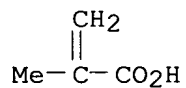
CM 5

CRN 100-42-5
CMF C8 H8



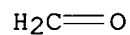
CM 6

CRN 79-41-4
CMF C4 H6 O2



CM 7

CRN 50-00-0
CMF C H2 O



L37 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:96099 HCAPLUS
DN 132:125354

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Compositions for **batteries** with **lithium** ion containing **electrolytes**

IN Moehwald, Helmut; Doetter, Gerhard; Blum, Rainer; Keller, Peter; Bauer, Stephan; Bronstert, Bernd

PA BASF A.-G., Germany

SO Ger. Offen., 32 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | DE 19835615 | A1 | 20000210 | DE 1998-19835615 | 19980806 |
| | TW 480757 | B | 20020321 | TW 1999-88113392 | 19990805 <-- |
| | CA 2339617 | AA | 20000217 | CA 1999-2339617 | 19990806 <-- |
| | WO 2000008068 | A1 | 20000217 | WO 1999-EP5702 | 19990806 <-- |
| | W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9954206 | A1 | 20000228 | AU 1999-54206 | 19990806 <-- |
| | EP 1109841 | A1 | 20010627 | EP 1999-940163 | 19990806 <-- |
| | EP 1109841 | B1 | 20020327 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | JP 2002522872 | T2 | 20020723 | JP 2000-563699 | 19990806 <-- |
| | ES 2176017 | T3 | 20021116 | ES 1999-940163 | 19990806 <-- |
| | US 6475663 | B1 | 20021105 | US 2001-762076 | 20010201 <-- |
| PRAI | DE 1998-19835615 | A | 19980806 | <-- | |
| | WO 1999-EP5702 | W | 19990806 | | |

AB The title composition contains (a) ≤ 1 weight% of a pigment (I) with a primary particle size of 5 nm to 100 μ m, which is a solid Ia or a **battery cathode** active material (Ib) or a an **anode** active material (Ic) or a mixture of the solid Ia with the compound Ib or the compound Ic, and (b) more than 99 to 100 weight% of a polymer

material (II), which comprises 1 to 100 weight% of a polymer or a copolymer (IIa) containing chains and/or reactive groups on the sides which are capable of crosslinking reactions thermally and/or under UV radiation, and 0 to 99 weight% at least one polymer or copolymer (IIb), which is free of reactive groups.

IC ICM H01M004-62

ICS H01G009-025; G01N027-406

CC 52-2 (**Electrochemical**, Radiational, and Thermal Energy Technology)

Section cross-reference(s): 38, 74

ST **battery lithium** ion contg **electrolyte**;
polymer **electrolyte battery**

IT **Battery anodes**

Battery cathodes

Battery electrolytes

Capacitors

Electrodes

Optical imaging devices

Sensors

Solid **electrolytes**

(compns. for **batteries** with **lithium** ion containing **electrolytes**)

- IT Fluoropolymers, uses
RL: DEV (Device component use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT Polyolefins
RL: TEM (Technical or engineered material use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT Polyurethanes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT **Windows**
Windows
(electrochromic; comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT **Ionic conductors**
(**films**; comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT **Secondary batteries**
(**lithium**; comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT Electrochromic devices
Electrochromic devices
(**windows**; comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT 13472-08-7, V 59
RL: CAT (Catalyst use); TEM (Technical or engineered material use); USES (Uses)
(Azostarter V 59; comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT 96-49-1, Ethylene **carbonate** 105-58-8 1137-42-4D,
4-Hydroxybenzophenone, reaction product with lauryl acrylate-
dihydrodicyclopentadienyl acrylate-glycidyl methacrylate-
ethylhexylacrylate copolymer 9011-17-0, Hexafluoropropylene-vinylidene
fluoride copolymer **12190-79-3**, Cobalt **lithium**
oxide colio2 21324-40-3, **Lithium**
hexafluorophosphate 249756-67-0D, Lauryl
acrylate-dihydrodicyclopentadienyl acrylate-glycidyl methacrylate-
ethylhexylacrylate copolymer, reaction product with 4-hydroxybenzophenone
RL: DEV (Device component use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT **7782-42-5**, Graphite, uses
RL: MOA (Modifier or additive use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing **electrolytes**)
- IT 9003-00-3, Acrylonitrile-vinyl chloride copolymer 9003-39-8,
Polyvinylpyrrolidone 9011-06-7, Vinyl chloride-vinylidene chloride
copolymer 24979-97-3, Polytetrahydrofuran 25322-68-3 54733-33-4,
Hexafluoropropylene-tetrafluoroethylene-vinyl fluoride copolymer
256446-81-8, Hexafluoropropylene-vinyl fluoride-vinylidene fluoride
terpolymer 256446-82-9, Hexafluoropropylene-trifluoroethylene-vinyl
fluoride copolymer
RL: TEM (Technical or engineered material use); USES (Uses)

(comps. for **batteries** with **lithium** ion containing **electrolytes**)

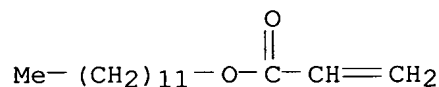
IT 12190-79-3, Cobalt lithium oxide colio2
 249756-67-0D, Lauryl acrylate-dihydrodicyclopentadienyl
 acrylate-glycidyl methacrylate-ethylhexylacrylate copolymer, reaction
 product with 4-hydroxybenzophenone
 RL: DEV (Device component use); USES (Uses)
 (comps. for **batteries** with **lithium** ion
 containing **electrolytes**)
 RN 12190-79-3 HCAPLUS
 CN Cobalt lithium oxide (CoLiO2) (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| O | 2 | 17778-80-2 |
| Co | 1 | 7440-48-4 |
| Li | 1 | 7439-93-2 |

RN 249756-67-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl
 2-propenoate, 2-ethylhexyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-
 methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

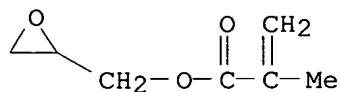
CM 1

CRN 2156-97-0
 CMF C15 H28 O2



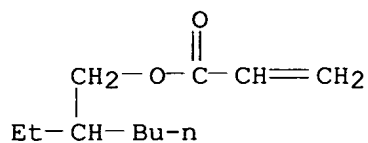
CM 2

CRN 106-91-2
 CMF C7 H10 O3



CM 3

CRN 103-11-7
 CMF C11 H20 O2

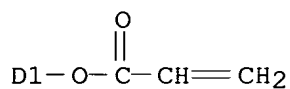
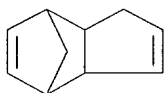


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



IT **7782-42-5**, Graphite, uses
RL: MOA (Modifier or additive use); USES (Uses)
(comps. for **batteries** with **lithium** ion containing
electrolytes)
RN 7782-42-5 HCAPLUS
CN Graphite (8CI, 9CI) (CA INDEX NAME)

C

L37 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:723073 HCAPLUS
DN 131:338050
TI Compositions suitable for **electrochemical cells**
IN Mohwald, Helmut; Dotter, Gerhard; Blum, Rainer; Keller, Peter; Bauer,
Stephan; Bronstert, Bernd
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DT **Patent**
LA German
FAN.CNT 1

Applicants

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|-------|-----------------|-------|
| ----- | ---- | ----- | ----- | ----- |

PI WO 9957161 A1 19991111 WO 1999-EP3028 19990504 <--
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, IN, JP, KR, KZ,
LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE
DE 19819752 A1 19991111 DE 1998-19819752 19980504
CA 2331040 AA 19991111 CA 1999-2331040 19990504 <--
AU 9938269 A1 19991123 AU 1999-38269 19990504 <--
EP 1088007 A1 20010404 EP 1999-920845 19990504 <--
EP 1088007 B1 20030226
R: DE, ES, FR, GB, IT
TW 478188 B 20020301 TW 1999-88107245 19990504 <--
JP 2002513986 T2 20020514 JP 2000-547129 19990504 <--
ES 2194459 T3 20031116 ES 1999-920845 19990504 <--
PRAI DE 1998-19819752 A 19980504 <--
WO 1999-EP3028 W 19990504
AB The title comps., which do not require inert gases for processing and are
useful as **electrodes**, solid **electrolytes**,
separators, etc., contain 1-99% pigments (primary particle size 5
nm-100 μ m) and 99-1% polymers (1-100% polymers bearing groups
crosslinkable by heat and/or UV; 99-0% polymers free from such reactive
groups). A mixture of hydrophobized wollastonite 20, Me₂CO 15, C₃F₆-CH₂:CF₂
copolymer (Kynarfex 2801) 6 and 300:480:120:100 dihydrodicyclopentadienyl
acrylate-2-ethylhexyl acrylate-glycidyl methacrylate-lauryl acrylate
copolymer 4.6 in xylene 34, and tris(2-ethylhexyl) **phosphate** 2.8
g was coated (30 μ m dry basis) on a solid support at 60°, dried,
and cured photochem. to give a solid **electrolyte** useful with
LiCoO₂ **cathodes** and graphite **anodes**.
IC ICM C08F008-00
ICS H01M010-40
CC 38-3 (**Plastics** Fabrication and Uses)
Section cross-reference(s): 42, 72
ST **electrochem** cell composite material;
electrolyte solid composite material; pigment composite
electrochem cell; wollastonite composite
electrolyte solid; fluoropolymer composite **electrolyte**
solid; acrylic polymer solid **electrolyte**; glycidyl methacrylate
copolymer **electrolyte** solid
IT **Anodes**
Capacitors
Cathodes
Electrochemical cells
Pigments, nonbiological
Solid **electrolytes**
(compns. suitable for **electrochem. cells**)
IT Fluoropolymers, uses
Polyamides, uses
Polyimides, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material
use); USES (Uses)
(compns. suitable for **electrochem. cells**)
IT Alkali metal compounds
Alkaline earth compounds
Carbides
Carbon black, uses
Carbon fibers, uses
Carbonates, uses
Group IIIA element compounds

Group IVA element compounds

Group IVB element compounds

Nitrides

Oxides (inorganic), uses

Phosphates, uses

Silicates, uses

Sulfates, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for **electrochem. cells**)

IT **Sensors**

(**electrochem.**; compns. suitable for **electrochem. cells**)

IT Fluoro rubber

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(hexafluoropropene-vinylidene fluoride; compns. suitable for **electrochem. cells**)

IT **Electrolytic cells**

(membrane; compns. suitable for **electrochem. cells**)

IT Amides, uses

Imides

RL: TEM (Technical or engineered material use); USES (Uses)

(metal; compns. suitable for **electrochem. cells**)

IT **Lithium** alloy, base

RL: TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for **electrochem. cells**)

IT 9002-84-0 9002-88-4 9003-07-0 9003-53-6 24937-79-9

249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for **electrochem. cells**)

IT **1314-13-2, Zinc oxide**, uses **1314-35-8,**

Tungsten oxide, uses **1314-62-1, Vanadium pentoxide,**

uses **1332-29-2, Tin oxide 3486-35-9, Zinc**

carbonate 7439-93-2, Lithium, uses

7782-42-5, Graphite, uses **11098-99-0, Molybdenum**

oxide 11113-67-0, Iron lithium oxide

11126-15-1, Lithium vanadium oxide

12017-97-9, Chromium lithium titanate (CrLiTiO₄)

12022-46-7, Lithium ferrate (LiFeO₂) 12031-65-1

, Lithium nickel oxide (LiNiO₂) 12190-79-3,

Cobalt lithium oxide (CoLiO₂) 12680-08-9,

Lithium titanium sulfide 13463-67-7, Titanium dioxide,

uses **13983-17-0, Wollastonite 37296-91-6,**

Lithium molybdenum oxide 37349-20-5,

Lithium tungsten oxide 37367-96-7,

Lithium molybdenum sulfide 39302-37-9, Lithium

titanium oxide 39457-42-6, Lithium manganese

oxide 51177-06-1, Chromium lithium

oxide 51680-57-0, Lithium zirconium sulfide

56321-19-8, Lithium niobium sulfide 61673-68-5

, Lithium tantalum sulfide 61673-71-0, Lithium

vanadium selenide 67542-73-8, Lithium ruthenium

oxide 71043-01-1, Lithium nickel phosphorus

sulfide 74245-06-0, Lithium vanadium sulfide

76214-28-3, Titanium carbonate 80341-49-7,

Iron lithium sulfide 96352-80-6, Lithium

molybdenum selenide 131344-56-4, Cobalt lithium nickel

oxide 146509-31-1, Molybdenum carbonate

152991-98-5, Aluminum **lithium** nickel **oxide**
 153327-00-5, Gallium **lithium** manganese **oxide**
 159967-11-0, **Lithium** magnesium nickel **oxide**
 177997-13-6, Aluminum cobalt **lithium** nickel
oxide 178961-04-1, Iron **lithium** phosphide
 sulfide 182442-95-1, Cobalt **lithium** manganese nickel
oxide 249756-69-2, Boron **lithium** nickel
oxide 249756-70-5, Tin boride **phosphate**
 (Sn₂B(PO₄))

RL: TEM (Technical or engineered material use); USES (Uses)
 (compns. suitable for **electrochem. cells**)

IT 249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material
 use); USES (Uses)

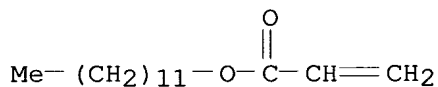
(**compns.** suitable for **electrochem. cells**)

RN 249756-67-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl
 2-propenoate, 2-ethylhexyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-
 methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

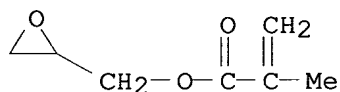
CM 1

CRN 2156-97-0
 CMF C15 H28 O2



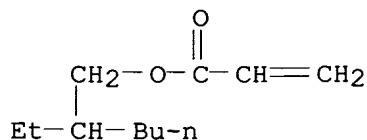
CM 2

CRN 106-91-2
 CMF C7 H10 O3



CM 3

CRN 103-11-7
 CMF C11 H20 O2

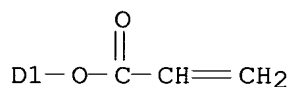
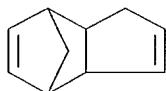


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

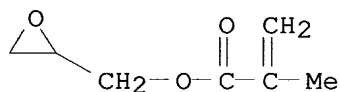
CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



RN 249756-68-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with
2-ethylhexyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-
indenyl 2-propenoate (9CI) (CA INDEX NAME)

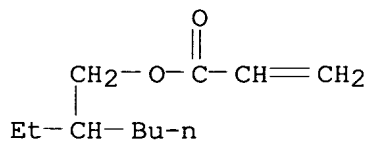
CM 1

CRN 106-91-2
CMF C7 H10 O3



CM 2

CRN 103-11-7
CMF C11 H20 O2



CM 3

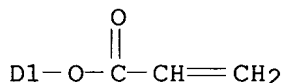
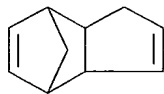
CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 4

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS

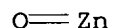


IT 1314-13-2, Zinc oxide, uses 1314-35-8, Tungsten oxide, uses 1314-62-1, Vanadium pentoxide, uses 1332-29-2, Tin oxide 3486-35-9, Zinc carbonate 7439-93-2, Lithium, uses 7782-42-5, Graphite, uses 11098-99-0, Molybdenum oxide 11113-67-0, Iron lithium oxide 11126-15-1, Lithium vanadium oxide 12017-97-9, Chromium lithium titanate (CrLiTiO₄) 12022-46-7, Lithium ferrate (LiFeO₂) 12031-65-1, Lithium nickel oxide (LiNiO₂) 12190-79-3, Cobalt lithium oxide (CoLiO₂) 12680-08-9, Lithium titanium sulfide 13463-67-7, Titanium dioxide, uses 13983-17-0, Wollastonite 37296-91-6, Lithium molybdenum oxide 37349-20-5, Lithium tungsten oxide 37367-96-7, Lithium molybdenum sulfide 39302-37-9, Lithium titanium oxide 39457-42-6, Lithium manganese oxide 51177-06-1, Chromium lithium oxide 51680-57-0, Lithium zirconium sulfide 56321-19-8, Lithium niobium sulfide 61673-68-5, Lithium tantalum sulfide 61673-71-0, Lithium vanadium selenide 67542-73-8, Lithium ruthenium oxide 71043-01-1, Lithium nickel phosphorus sulfide 74245-06-0, Lithium vanadium sulfide 76214-28-3, Titanium carbonate 80341-49-7, Iron lithium sulfide 96352-80-6, Lithium molybdenum selenide 131344-56-4, Cobalt lithium nickel oxide 146509-31-1, Molybdenum carbonate 152991-98-5, Aluminum lithium nickel oxide 153327-00-5, Gallium lithium manganese oxide 159967-11-0, Lithium magnesium nickel oxide 177997-13-6, Aluminum cobalt lithium nickel oxide 178961-04-1, Iron lithium phosphide sulfide 182442-95-1, Cobalt lithium manganese nickel oxide 249756-69-2, Boron lithium nickel oxide 249756-70-5, Tin boride phosphate (Sn₂B(PO₄))

RL: TEM (Technical or engineered material use); USES (Uses) (compns. suitable for electrochem. cells)

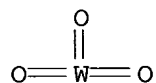
RN 1314-13-2 HCAPLUS

CN Zinc oxide (ZnO) (9CI) (CA INDEX NAME)



RN 1314-35-8 HCAPLUS

CN Tungsten oxide (WO₃) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 1314-62-1 HCAPLUS

CN Vanadium oxide (V₂O₅) (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

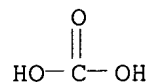
RN 1332-29-2 HCAPLUS

CN Tin oxide (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 3486-35-9 HCAPLUS

CN Carbonic acid, zinc salt (1:1) (8CI, 9CI) (CA INDEX NAME)



RN 7439-93-2 HCAPLUS

CN Lithium (7CI, 8CI, 9CI) (CA INDEX NAME)

Li

RN 7782-42-5 HCAPLUS

CN Graphite (8CI, 9CI) (CA INDEX NAME)

C

RN 11098-99-0 HCAPLUS

CN Molybdenum oxide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11113-67-0 HCAPLUS

CN Iron lithium oxide (9CI) (CA INDEX NAME)

| | | | | |
|-----------|--|-------|--|-----------------|
| Component | | Ratio | | Component |
| | | | | Registry Number |

| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | x | 17778-80-2 |
| Li | x | 7439-93-2 |
| Fe | x | 7439-89-6 |

RN 11126-15-1 HCAPLUS

CN Lithium vanadium oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | x | 17778-80-2 |
| V | x | 7440-62-2 |
| Li | x | 7439-93-2 |

RN 12017-97-9 HCAPLUS

CN Chromium lithium titanium oxide (CrLiTiO₄) (7CI, 9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | 4 | 17778-80-2 |
| Cr | 1 | 7440-47-3 |
| Ti | 1 | 7440-32-6 |
| Li | 1 | 7439-93-2 |

RN 12022-46-7 HCAPLUS

CN Iron lithium oxide (FeLiO₂) (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | 2 | 17778-80-2 |
| Li | 1 | 7439-93-2 |
| Fe | 1 | 7439-89-6 |

RN 12031-65-1 HCAPLUS

CN Lithium nickel oxide (LiNiO₂) (6CI, 8CI, 9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | 2 | 17778-80-2 |
| Ni | 1 | 7440-02-0 |
| Li | 1 | 7439-93-2 |

RN 12190-79-3 HCAPLUS

CN Cobalt lithium oxide (CoLiO₂) (9CI) (CA INDEX NAME)

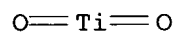
| Component | Ratio | Component Registry Number |
|-----------|-------|---------------------------|
| O | 2 | 17778-80-2 |
| Co | 1 | 7440-48-4 |
| Li | 1 | 7439-93-2 |

RN 12680-08-9 HCAPLUS

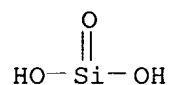
CN Lithium titanium sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| S | x | 7704-34-9 |
| Ti | x | 7440-32-6 |
| Li | x | 7439-93-2 |

RN 13463-67-7 HCAPLUS
 CN Titanium oxide (TiO₂) (8CI, 9CI) (CA INDEX NAME)



RN 13983-17-0 HCAPLUS
 CN Wollastonite (Ca(SiO₃)) (9CI) (CA INDEX NAME)



● Ca

RN 37296-91-6 HCAPLUS
 CN Lithium molybdenum oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| O | x | 17778-80-2 |
| Mo | x | 7439-98-7 |
| Li | x | 7439-93-2 |

RN 37349-20-5 HCAPLUS
 CN Lithium tungsten oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| O | x | 17778-80-2 |
| W | x | 7440-33-7 |
| Li | x | 7439-93-2 |

RN 37367-96-7 HCAPLUS
 CN Lithium molybdenum sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| S | x | 7704-34-9 |
| Mo | x | 7439-98-7 |
| Li | x | 7439-93-2 |

RN 39302-37-9 HCAPLUS
 CN Lithium titanium oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| O | x | 17778-80-2 |
| Ti | x | 7440-32-6 |
| Li | x | 7439-93-2 |

RN 39457-42-6 HCAPLUS
 CN Lithium manganese oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| O | x | 17778-80-2 |
| Mn | x | 7439-96-5 |
| Li | x | 7439-93-2 |

RN 51177-06-1 HCAPLUS
 CN Chromium lithium oxide (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 51680-57-0 HCAPLUS
 CN Lithium zirconium sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| S | x | 7704-34-9 |
| Zr | x | 7440-67-7 |
| Li | x | 7439-93-2 |

RN 56321-19-8 HCAPLUS
 CN Lithium niobium sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| S | x | 7704-34-9 |
| Nb | x | 7440-03-1 |
| Li | x | 7439-93-2 |

RN 61673-68-5 HCAPLUS
 CN Lithium tantalum sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| S | x | 7704-34-9 |
| Ta | x | 7440-25-7 |
| Li | x | 7439-93-2 |

RN 61673-71-0 HCAPLUS
 CN Lithium vanadium selenide (9CI) (CA INDEX NAME)

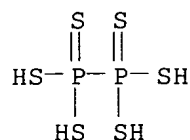
| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| Se | x | 7782-49-2 |

| | | | | |
|----|--|---|--|-----------|
| V | | x | | 7440-62-2 |
| Li | | x | | 7439-93-2 |

RN 67542-73-8 HCAPLUS
 CN Lithium ruthenium oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| O | x | 17778-80-2 |
| Ru | x | 7440-18-8 |
| Li | x | 7439-93-2 |

RN 71043-01-1 HCAPLUS
 CN Thiohypophosphoric acid ([(HS)2P(S)]2), lithium nickel salt (9CI) (CA INDEX NAME)



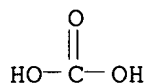
●x Li

●x Ni(x)

RN 74245-06-0 HCAPLUS
 CN Lithium vanadium sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| S | x | 7704-34-9 |
| V | x | 7440-62-2 |
| Li | x | 7439-93-2 |

RN 76214-28-3 HCAPLUS
 CN Carbonic acid, titanium salt (9CI) (CA INDEX NAME)



●x Ti(x)

RN 80341-49-7 HCAPLUS
 CN Iron lithium sulfide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| S | x | 7704-34-9 |
| Li | x | 7439-93-2 |
| Fe | x | 7439-89-6 |

RN 96352-80-6 HCAPLUS

CN Lithium molybdenum selenide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| Se | x | 7782-49-2 |
| Mo | x | 7439-98-7 |
| Li | x | 7439-93-2 |

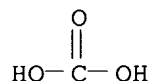
RN 131344-56-4 HCAPLUS

CN Cobalt lithium nickel oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| O | x | 17778-80-2 |
| Co | x | 7440-48-4 |
| Ni | x | 7440-02-0 |
| Li | x | 7439-93-2 |

RN 146509-31-1 HCAPLUS

CN Carbonic acid, molybdenum salt (9CI) (CA INDEX NAME)



● x Mo(x)

RN 152991-98-5 HCAPLUS

CN Aluminum lithium nickel oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| O | x | 17778-80-2 |
| Ni | x | 7440-02-0 |
| Li | x | 7439-93-2 |
| Al | x | 7429-90-5 |

RN 153327-00-5 HCAPLUS

CN Gallium lithium manganese oxide (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |

| | | | | |
|----|--|---|--|------------|
| O | | x | | 17778-80-2 |
| Ga | | x | | 7440-55-3 |
| Mn | | x | | 7439-96-5 |
| Li | | x | | 7439-93-2 |

RN 159967-11-0 HCAPLUS

CN Lithium magnesium nickel oxide (9CI) (CA INDEX NAME)

| Component | | Ratio | | Component Registry Number |
|-----------|--|-------|--|------------------------------|
| ===== | | | | |
| O | | x | | 17778-80-2 |
| Ni | | x | | 7440-02-0 |
| Mg | | x | | 7439-95-4 |
| Li | | x | | 7439-93-2 |

RN 177997-13-6 HCAPLUS

CN Aluminum cobalt lithium nickel oxide (9CI) (CA INDEX NAME)

| Component | | Ratio | | Component Registry Number |
|-----------|--|-------|--|------------------------------|
| ===== | | | | |
| O | | x | | 17778-80-2 |
| Co | | x | | 7440-48-4 |
| Ni | | x | | 7440-02-0 |
| Li | | x | | 7439-93-2 |
| Al | | x | | 7429-90-5 |

RN 178961-04-1 HCAPLUS

CN Iron lithium phosphide sulfide (9CI) (CA INDEX NAME)

| Component | | Ratio | | Component Registry Number |
|-----------|--|-------|--|------------------------------|
| ===== | | | | |
| P | | x | | 7723-14-0 |
| S | | x | | 7704-34-9 |
| Li | | x | | 7439-93-2 |
| Fe | | x | | 7439-89-6 |

RN 182442-95-1 HCAPLUS

CN Cobalt lithium manganese nickel oxide (9CI) (CA INDEX NAME)

| Component | | Ratio | | Component Registry Number |
|-----------|--|-------|--|------------------------------|
| ===== | | | | |
| O | | x | | 17778-80-2 |
| Co | | x | | 7440-48-4 |
| Ni | | x | | 7440-02-0 |
| Mn | | x | | 7439-96-5 |
| Li | | x | | 7439-93-2 |

RN 249756-69-2 HCAPLUS

CN Boron lithium nickel oxide (9CI) (CA INDEX NAME)

| Component | | Ratio | | Component Registry Number |
|-----------|--|-------|--|------------------------------|
| ===== | | | | |
| O | | x | | 17778-80-2 |
| B | | x | | 7440-42-8 |

| | | | | |
|----|--|---|--|-----------|
| Ni | | x | | 7440-02-0 |
| Li | | x | | 7439-93-2 |

RN 249756-70-5 HCAPLUS

CN Tin boride phosphate (Sn₂B(PO₄)) (9CI) (CA INDEX NAME)

| Component | Ratio | Component Registry Number |
|-----------|-------|------------------------------|
| ===== | ===== | ===== |
| O4P | 1 | 14265-44-2 |
| B | 1 | 7440-42-8 |
| Sn | 2 | 7440-31-5 |

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:427458 HCAPLUS

DN 131:109820

TI Build-up multilayer printed circuit boards, fabrication, and photochemical polymer composition

IN Tsukada, Katsushige; Yoshino, Toshizumi; Ito, Toshihiko; Hirayama, Takao

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|-----------------|-----------------|--------------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | JP 11186718 | A2 | <u>19990709</u> | JP 1997-349725 | 19971218 <-- |
| PRAI | JP 1997-349725 | | <u>19971218</u> | | <-- |

AB The title fabrication involves (1) patterning a conductive layer on a substrate, (2) forming a photochem. polymer composition layer containing an anion- or cation-adsorbing powdered inorg. ion exchanger (size $\leq 5 \mu\text{m}$), (3) photo-irradiating and developing the photochem. polymer composition layer to give a cured pattern film, (4) surface roughening the cured pattern film with an oxidant, and (5) electroless plating over the cured film to give a conductive layer. The inorg. ion exchanger may be Sb₂O₅, Sb₂O₃ hydrates, or their hydrotalcite mixture. The photochem. polymer composition comprises (a) an epoxy photochem. prepolymer, (b) rubber-like crosslinking copolymer (particle size $\leq 5 \mu\text{m}$), (c) an anion- or cation-adsorbing inorg. ion exchanger (particle size $\leq 5 \mu\text{m}$), and (d) a photochem. polymerization initiator activated by photoirradn. to generate free radicals. The fabrication provides the printed circuit boards with an excellent corrosion resistance and thermal resistance,.

IC ICM H05K003-46

ICS H05K003-46; G03F007-027; H05K001-03

CC 76-2 (Electric Phenomena)

Section cross-reference(s): 38, 39, 57

ST epoxy photochem polymer patterning roughening oxidant multilayer circuit board; antimony **oxide** ion exchanger patterning epoxy photochem prepolymer

IT Oxidizing agents

Surface roughness

(build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Thermal resistance

(circuit boards; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Coating process
(electroless; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Printed circuit boards
(multilayer, multilayer; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Epoxy resins, properties
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(photochem. prepolymer; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Polymerization catalysts
(photopolymn., free radicals; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT Corrosion
(resistance, circuit boards; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT 230636-49-4
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT 1309-64-4, Antimony **oxide** (Sb2O3), properties 1314-60-9, Antimony **oxide** (Sb2O5) 12304-65-3, Hydrotalcite
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(hydrate, ion exchanger; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT 119313-12-1, 2-Benzyl-2-dimethylamino-1-(4-morpholinophenyl)-1-butanone
RL: MOA (Modifier or additive use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(photochem. initiator; build-up multilayer printed circuit boards, fabrication, and photochem. polymer composition)

IT **230636-50-7**
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(photochem. prepolymer; build-up multilayer printed circuit boards, fabrication, and photochem. polymer **composition**)

IT **230636-50-7**
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process); USES (Uses)
(photochem. prepolymer; build-up multilayer printed circuit boards, fabrication, and photochem. polymer **composition**)

RN 230636-50-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-isocyanatoethyl ester, polymer with bis[4-(dimethylamino)phenyl]methanone, 1,3-butadiene, diethenylbenzene, EOCN 104, α, α' -[(1-methylethylidene)di-4,1-phenylene]bis[ω -(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)], oxiranylmethyl 2-methyl-2-propenoate, 2-propenenitrile, 2-propenoic acid and 6-[2-(2-undecyl-1H-imidazol-1-yl)ethyl]-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 70903-88-7

CMF Unspecified

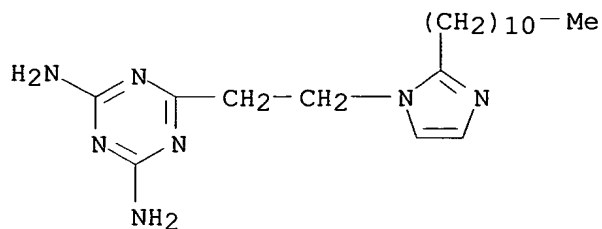
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 50729-75-4

CMF C19 H33 N7

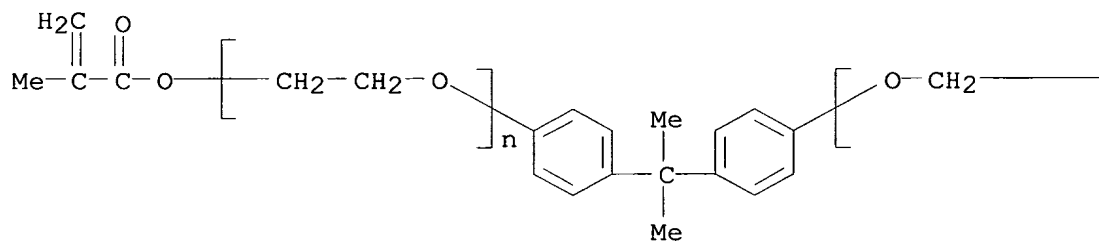


CM 3

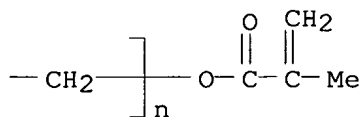
CRN 41637-38-1

CMF (C2 H4 O)_n (C2 H4 O)_n C23 H24 O4

CCI PMS



PAGE 1-A

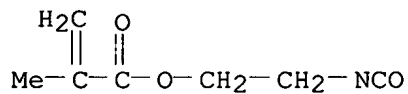


PAGE 1-B

CM 4

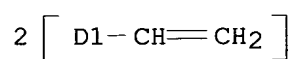
CRN 30674-80-7

CMF C7 H9 N O3



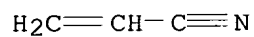
CM 5

CRN 1321-74-0
CMF C10 H10
CCI IDS



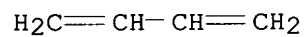
CM 6

CRN 107-13-1
CMF C3 H3 N



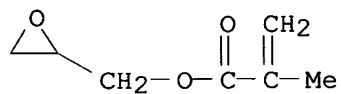
CM 7

CRN 106-99-0
CMF C4 H6



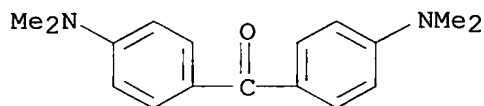
CM 8

CRN 106-91-2
CMF C7 H10 O3



CM 9

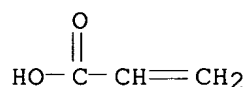
CRN 90-94-8
CMF C17 H20 N2 O



CM 10

CRN 79-10-7

CMF C3 H4 O2



L37 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:330569 HCAPLUS

DN 130:353098

TI Impact modified polyester/**polycarbonate** blends

IN Weber, Martin; Fischer, Michael; Blinne, Gerd

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|-----------------|------------------|--------------|
| PI | DE 19750627 | A1 | <u>19990520</u> | DE 1997-19750627 | 19971114 |
| | WO 9925770 | A1 | 19990527 | WO 1998-EP7112 | 19981106 <-- |
| | W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HU, ID, IL, JP, KR, KZ, LT, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | AU 9912336 | A1 | 19990607 | AU 1999-12336 | 19981106 <-- |
| | EP 1030887 | A1 | 20000830 | EP 1998-955550 | 19981106 <-- |
| | EP 1030887 | B1 | 20020724 | | |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | ES 2181300 | T3 | 20030216 | ES 1998-955550 | 19981106 <-- |
| | CN 1113935 | B | 20030709 | CN 1998-813096 | 19981106 <-- |
| | US 6653391 | B1 | 20031125 | US 2000-554190 | 20000511 <-- |
| PRAI | DE 1997-19750627 | A | 19971114 | <-- | |
| | WO 1998-EP7112 | W | 19981106 | <-- | |

AB Impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability contain 1-99% polyester, 0-98% **polycarbonate**, 1-80% special styrene graft copolymer, 0-80% styrene copolymer, 0-30% rubber, 0-60% fiber or particle filler, and 0-20% addnl. additives. Thus, a thermoplastic molding composition containing poly(butylene terephthalate) 39, bisphenol A **polycarbonate** 50, core-shell acrylonitrile-Bu acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer 7, acrylonitrile-styrene copolymer 3, and tetrakis(2,4-di-tert-butylphenyl)-4,4'-diphenylene diphosphonite 1 part displayed HDT B heat resistance 100°, work of fracture at -30° 64 Nm, work of fracture at

-30° after 500 h exposure to xenon radiation 49 Nm, and a coefficient of thermal expansion (CTE) dimensional stability of $84 + 10^{-6} \text{ K}^{-1}$.

- IC ICM C08L067-02
ICS C08L069-00; C08L051-00; C08J005-00; C08J005-18; D01F006-96;
B29C047-00; B29C049-04; B29C045-00
- CC 37-6 (**Plastics** Manufacture and Processing)
- ST polyester molding compn impact modifier; **polycarbonate** polyester molding compn impact modifier; styrene graft polymer impact modifier polyester
- IT Polymer blends
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(bisphenol A **polycarbonate**-poly(butylene terephthalate); impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT Polyesters, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT **Polycarbonates**, properties
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(polyester blends; impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT 24968-12-5 26062-94-2, Poly(butylene terephthalate)
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(bisphenol A **polycarbonate** blends; impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT **106912-44-1P**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
224643-75-8P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(impact modifier; impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT **83560-22-9P 224643-66-7P 224643-69-0P 224643-72-5P**
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT 24936-68-3, properties 25037-45-0
RL: PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); PROC (Process); USES (Uses)
(poly(butylene terephthalate) blends; impact-modified polyester and polyester-**polycarbonate** molding compns. with good thermoforming stability, weather resistance and dimensional stability)
- IT **106912-44-1P**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
224643-75-8P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP

(Preparation); USES (Uses)
 (impact modifier; impact-modified polyester and polyester-
polycarbonate molding **compns.** with good thermoforming
 stability, weather resistance and dimensional stability)

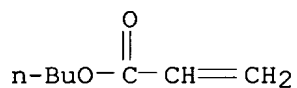
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

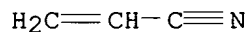
CMF C7 H12 O2



CM 2

CRN 107-13-1

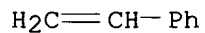
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

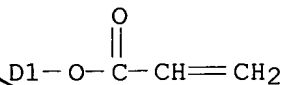
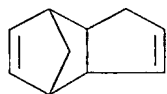
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



RN 224643-75-8 HCAPLUS

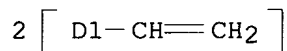
CN 2-Propenoic acid, butyl ester, polymer with diethenylbenzene, ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0

CMF C10 H10

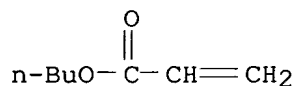
CCI IDS



CM 2

CRN 141-32-2

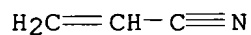
CMF C7 H12 O2



CM 3

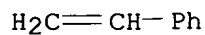
CRN 107-13-1

CMF C3 H3 N



CM 4

CRN 100-42-5
CMF C8 H8

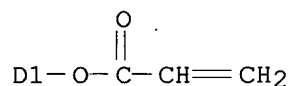
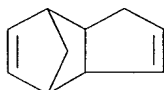


CM 5

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 6

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



IT 83560-22-9P 224643-66-7P 224643-69-0P
224643-72-5P

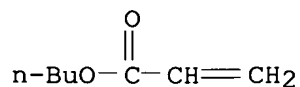
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PREP (Preparation); PROC (Process)
(impact-modified polyester and polyester-**polycarbonate** molding **compns.** with good thermoforming stability, weather resistance and dimensional stability)

RN 83560-22-9 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

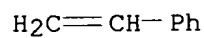
CM 1

CRN 141-32-2
CMF C7 H12 O2



CM 2

CRN 100-42-5
CMF C8 H8

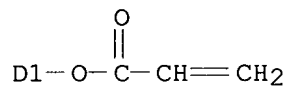
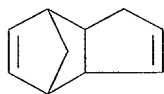


CM 3

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 4

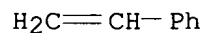
CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



RN 224643-66-7 HCAPLUS
CN 2-Propenoic acid, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl ester,
polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-42-5
CMF C8 H8

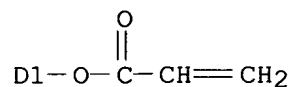
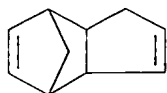


CM 2

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 3

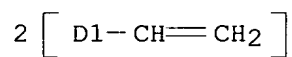
CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



RN 224643-69-0 HCAPLUS
 CN 2-Propenoic acid, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl ester,
 polymer with diethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

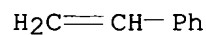
CM 1

CRN 1321-74-0
 CMF C10 H10
 CCI IDS



CM 2

CRN 100-42-5
 CMF C8 H8

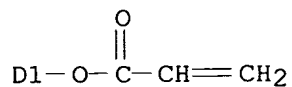
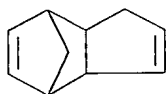


CM 3

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 4

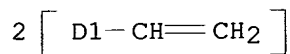
CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



RN 224643-72-5 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with diethenylbenzene,
 ethenylbenzene and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate (9CI) (CA INDEX NAME)

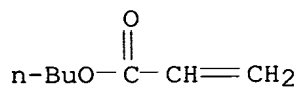
CM 1

CRN 1321-74-0
 CMF C10 H10
 CCI IDS



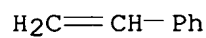
CM 2

CRN 141-32-2
 CMF C7 H12 O2



CM 3

CRN 100-42-5
 CMF C8 H8

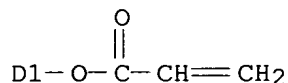
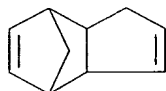


CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



L37 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:114171 HCAPLUS

DN 130:183305

TI Active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsaturated polyester compositions

IN Harui, Nobuo; Fukuoka, Hirotake; Abe, Yoichi

PA Dainippon Ink and Chemicals, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | JP 11043519 | A2 | 19990216 | JP 1997-204489 | 19970730 <-- |
| PRAI | JP 1997-204489 | | 19970730 | <-- | |

AB Title compns., useful for coatings, adhesives, etc., contain (A) unsatd. polyesters modified with dicyclopentadiene (I) and polyisocyanates, (B) photopolymerizable monomers, and (C) photopolymn. initiators. Thus, an unsatd. polyester prepared from I, maleic anhydride, diethylene glycol, propylene glycol, and 2,4-tolylene diisocyanate 55, styrene 35, Newfrontier PE 300 (polyethylene glycol diacrylate) 10, bis(2-methacryloyloxyethyl) acid **phosphate** 3, and Irgacure 651 (2,2-dimethoxy-1,2-diphenylethan-1-one) 3 parts were mixed, applied on a steel, and irradiated with a Hg lamp to give a coating showing good heat-cycle and impact resistance.

IC ICM C08F283-01

ICS C08L067-06; C08L067-08; C08L075-14

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 38, 42

ST UV curable dicyclopentadiene polyisocyanate modified polyester; impact resistance coating UV curable polyester; cold resistance coating UV curable polyester; heat resistance coating UV curable polyester

IT Coating materials

(UV-curable; active energy beam-curable dicyclopentadiene- and

polyisocyanate-modified unsatd. polyester compns.)

IT Rice (*Oryza sativa*)
(bran, fatty acids, polyester-polyurethanes; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Coating materials
Coating materials
(cold-resistant; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Coating materials
(heat-resistant; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Coating materials
Coating materials
(impact-resistant; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Polyurethanes, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyester-; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Fatty acids, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(rice bran, polyester-polyurethanes; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT Bran
(rice, fatty acids, polyester-polyurethanes; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT 57-55-6DP, Propylene glycol, polyester-polyurethanes 77-73-6DP, Dicyclopentadiene, polyester-polyurethanes 108-31-6DP, Maleic anhydride, polyester-polyurethanes, preparation 111-46-6DP, Diethylene glycol, polyester-polyurethanes 584-84-9DP, 2,4-Tolylene diisocyanate, polyester-polyurethanes 220604-92-2P 220604-98-8P 220605-05-0P 220605-13-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT 12597-69-2, Steel, miscellaneous
RL: MSC (Miscellaneous)
(substrates; active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

IT 220604-92-2P 220604-98-8P 220605-05-0P 220605-13-0P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(active energy beam-curable dicyclopentadiene- and polyisocyanate-modified unsatd. polyester compns.)

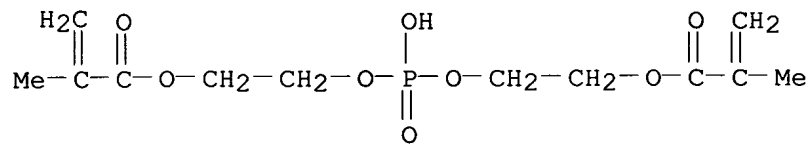
RN 220604-92-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phosphinobis(oxy-2,1-ethanediyl) ester, polymer with 2,4-diisocyanato-1-methylbenzene, ethenylbenzene, 2,5-furandione, α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 2,2'-oxybis[ethanol], 1,2-propanediol and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 32435-46-4

CMF C12 H19 O8 P

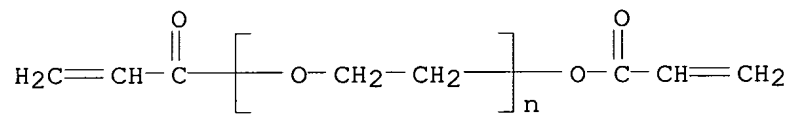


CM 2

CRN 26570-48-9

CMF (C2 H4 O)_n C6 H6 O3

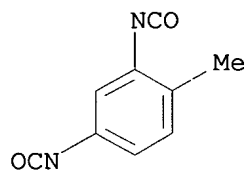
CCI PMS



CM 3

CRN 584-84-9

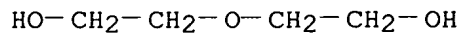
CMF C9 H6 N2 O2



CM 4

CRN 111-46-6

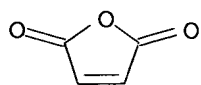
CMF C4 H10 O3



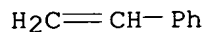
CM 5

CRN 108-31-6

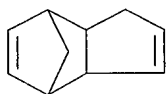
CMF C4 H2 O3



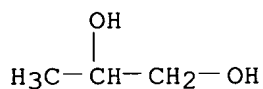
CM 6
CRN 100-42-5
CMF C8 H8



CM 7
CRN 77-73-6
CMF C10 H12

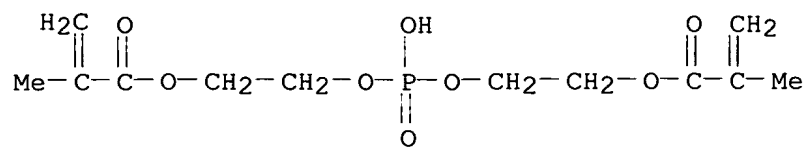


CM 8
CRN 57-55-6
CMF C3 H8 O2



RN 220604-98-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, phosphinicobis(oxy-2,1-ethanediyl) ester, polymer with 2,4-diisocyanato-1-methylbenzene, ethenylbenzene, 2,5-furandione, α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl), 2,2'-oxybis[ethanol], oxybis[propanol], 1,2-propanediol, 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1
CRN 32435-46-4
CMF C12 H19 O8 P

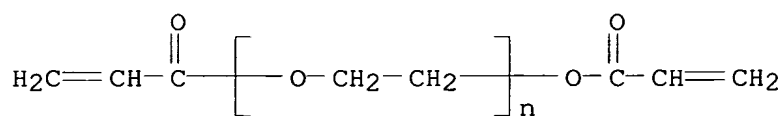


CM 2

CRN 26570-48-9

CMF (C2 H4 O)_n C6 H6 O3

CCI PMS

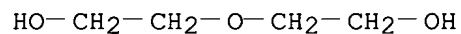


CM 3

CRN 25265-71-8

CMF C6 H14 O3

CCI IDS

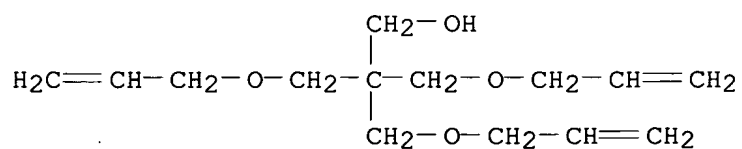


2 (D1-Me)

CM 4

CRN 1471-17-6

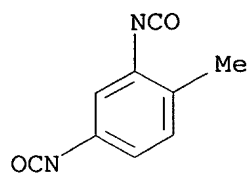
CMF C14 H24 O4



CM 5

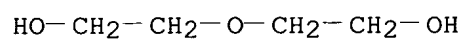
CRN 584-84-9

CMF C9 H6 N2 O2



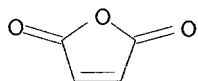
CM 6

CRN 111-46-6
CMF C4 H10 O3



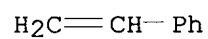
CM 7

CRN 108-31-6
CMF C4 H2 O3



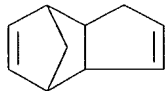
CM 8

CRN 100-42-5
CMF C8 H8



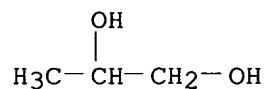
CM 9

CRN 77-73-6
CMF C10 H12



CM 10

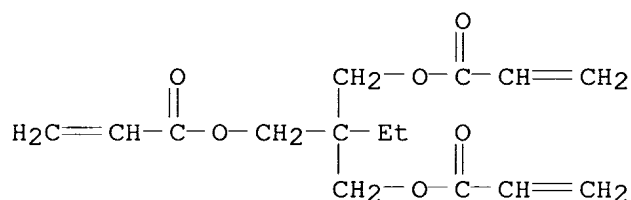
CRN 57-55-6
CMF C3 H8 O2



RN 220605-05-0 HCAPLUS
 CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 2,5-furandione, 2,2'-oxybis[ethanol], 1,2-propanediol, 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene and 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)

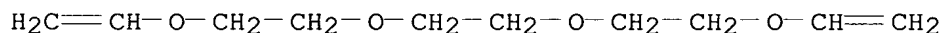
CM 1

CRN 15625-89-5
 CMF C15 H20 O6



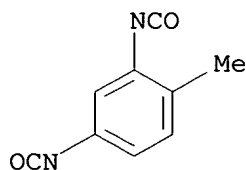
CM 2

CRN 765-12-8
 CMF C10 H18 O4



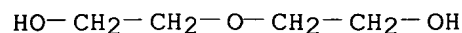
CM 3

CRN 584-84-9
 CMF C9 H6 N2 O2



CM 4

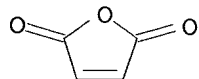
CRN 111-46-6
 CMF C4 H10 O3



CM 5

CRN 108-31-6

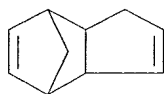
CMF C4 H2 O3



CM 6

CRN 77-73-6

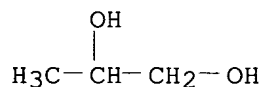
CMF C10 H12



CM 7

CRN 57-55-6

CMF C3 H8 O2



RN 220605-13-0 HCAPLUS

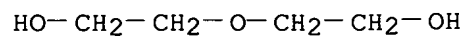
CN 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2,4-diisocyanato-1-methylbenzene, 2,5-furandione, 2,2'-oxybis[ethanol], oxybis[propanol], 1,2-propanediol, 3-(2-propenyloxy)-2,2-bis[(2-propenyloxy)methyl]-1-propanol, 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene and 3,6,9,12-tetraoxatetradeca-1,13-diene (9CI) (CA INDEX NAME)

CM 1

CRN 25265-71-8

CMF C6 H14 O3

CCI IDS

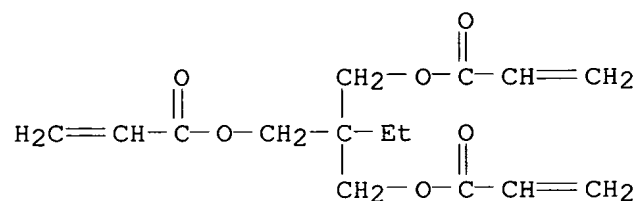


2 (D1-Me)

CM 2

CRN 15625-89-5

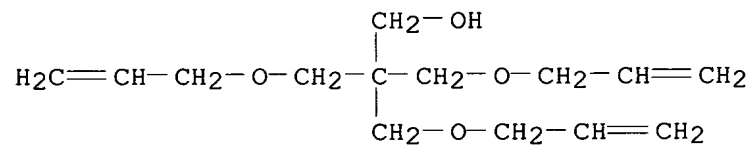
CMF C15 H20 O6



CM 3

CRN 1471-17-6

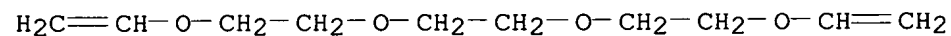
CMF C14 H24 O4



CM 4

CRN 765-12-8

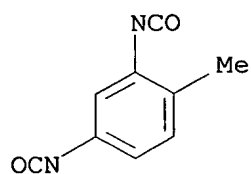
CMF C10 H18 O4



CM 5

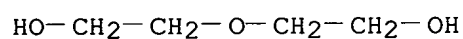
CRN 584-84-9

CMF C9 H6 N2 O2



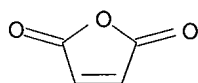
CM 6

CRN 111-46-6
CMF C4 H10 O3



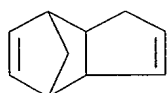
CM 7

CRN 108-31-6
CMF C4 H2 O3



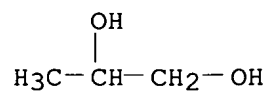
CM 8

CRN 77-73-6
CMF C10 H12



CM 9

CRN 57-55-6
CMF C3 H8 O2



L37 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:23280 HCAPLUS

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

DN 130:111368
 TI Photopolymerizable compositions, resin compositions containing them, adhesives based on them, and laminated articles therewith
 IN Kimura, Yoshio; Hagiwara, Toshio
 PA Tokuyama Sekiyu Kagaku K. K., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF

DT **Patent**
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|-----------------|-----------------|--------------|
| PI | JP 11001507 | A2 | <u>19990106</u> | JP 1997-172970 | 19970613 <-- |
| PRAI | JP 1997-172970 | | 19970613 | | <-- |

AB The compns. polymerizable with visible or near IR light comprise monomers and/or oligomers containing ≥ 1 ethylenically unsatd. bond, organic ionic colorants having absorption at visible or near IR regions, and organic azobis compds. Thus, a composition comprising isobornyl acrylate 100, acryloylmorpholine 16, 2,2'-azobis(2,4-dimethylvaleronitrile) 1, and 1,1,5,5-tetrakis(4-diethylaminophenyl)pentadienylum p-toluenesulfonate (λ_{\max} 820 nm) 0.1 part was sandwiched with **polycarbonate** (Panlite PC 111) plates or acrylic resin (Sumipex 000) plates and irradiated with 370-900 nm light to give test pieces showing material failure in a bending adhesion test for both samples.

IC ICM C08F004-04

ICS B32B007-12; B32B027-00; C08F002-50; C09J004-00; C09J157-00

CC 38-3 (**Plastics** Fabrication and Uses)

ST polymethine visible photoinitiator acrylic adhesive

IT Polyurethanes, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic; visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT Dyes

(ionic; visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT Adhesives

(photocurable; visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT Polymerization catalysts

(photopolymn., ionic dyes and azobis compds.; visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT Laminated plastics, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT Acrylic polymers, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT **Polycarbonates**, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(visible light- or near IR-polymerizable acrylic adhesive compns. for plastic laminates)

IT 78-67-1, 2,2'-Azobisisobutyronitrile 81-88-9, Rhodamine B 548-62-9, Crystal Violet 573-58-0, Congo Red 3056-93-7, Astrazon Orange G 4419-11-8, 2,2'-Azobis(2,4-dimethylvaleronitrile) 23410-90-4

RL: CAT (Catalyst use); USES (Uses)

(visible light- or near IR-polymerizable acrylic adhesive compns. for

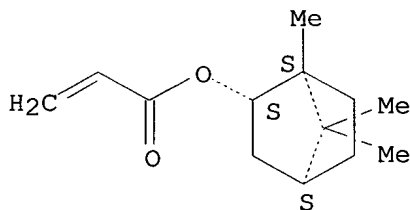
- plastic laminates)
- IT 30323-87-6P, Isobornyl acrylate homopolymer 208394-44-9P,
 Acryloylmorpholine-isobornyl acrylate copolymer **219130-79-7P**,
 Dicyclopentenyl acrylate-isobornyl acrylate copolymer 219130-80-0P,
 Acryloylmorpholine-phenoxyethyl acrylate copolymer 219772-31-3P
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (visible light- or near IR-polymerizable acrylic adhesive
 compns. for plastic laminates)
- IT 9011-14-7 96420-85-8, Panlite PC 111
 RL: TEM (Technical or engineered material use); USES (Uses)
 (visible light- or near IR-polymerizable acrylic adhesive compns. for
 plastic laminates)
- IT **219130-79-7P**, Dicyclopentenyl acrylate-isobornyl acrylate
 copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (visible light- or near IR-polymerizable acrylic adhesive
 compns. for plastic laminates)
- RN 219130-79-7 HCAPLUS
- CN 2-Propenoic acid, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl ester,
 polymer with rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl
 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5888-33-5

CMF C13 H20 O2

Relative stereochemistry.



CM 2

CRN 12542-30-2

CMF C13 H16 O2

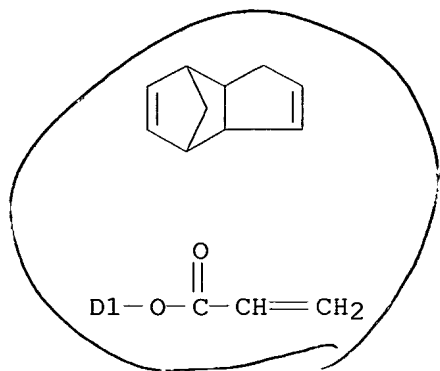
CCI IDS

CM 3

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:758664 HCAPLUS

DN 130:67884

TI Radiation-curable resin compositions showing good adhesion to substrates of polypropylene etc.

IN Kano, Hirokazu; Ishii, Kazuhiko; Tokuta, Kiyohisa

PA Nippon Kayaku Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|--------------|-----------------|--------------|
| PI | JP 10310621 | A2 | 19981124 | JP 1997-138009 | 19970514 <-- |
| PRAI | JP 1997-138009 | | 19970514 <-- | | |

AB Title compns. comprise (A) epoxy (meth)acrylate, (B) $\text{CH}_2\text{:CR}_1\text{CO}_2(\text{CH}_2\text{CH}_2\text{O})_l\text{Q}_1$ ($l = 0-4$; $\text{R}_1 = \text{H, Me}$; $\text{Q}_1 = \text{dicyclopentenyl}$), optionally (C) $\text{CH}_2\text{CR}_2\text{CO}_2(\text{CH}_2\text{CH}_2\text{O})_m\text{Q}_2$ ($m = 0-4$; $\text{R}_2 = \text{H, Me}$; $\text{Q}_2 = \text{tricyclodecanyl}$), and (D) photoinitiators and show good adhesion to films or sheets of polypropylene (I), polyethylene, polyester, polyacrylates, glass, **polycarbonates**, or amorphous polyolefins. Thus, a composition comprising Kayarad R 381 30, Fancyl FA 513A 70, Irgacure 184 8, Irgacure 907 2, and SH 28PA 1 part was applied on printed I film and UV-cured to form a coating showing good adhesion to the film.

IC ICM C08F299-02

ICS C08F290-06; C09D004-02

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37

ST radiation curable coating dicyclopentenylloxyethyl acrylate adhesion; tricyclodecanyl acrylate radiation curable coating adhesion; polypropylene adhesion coating acrylic epoxy resin; UV curable acrylic epoxy coating polypropylene

IT Coating materials

(UV-curable; radiation-curable epoxy acrylate compns. showing good adhesion to substrates)

IT Epoxy resins, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(acrylic; radiation-curable epoxy acrylate compns. showing good adhesion to substrates)

IT Glass substrates

(radiation-curable epoxy acrylate compns. showing good adhesion to substrates)

IT Coating materials

(radiation-curable; radiation-curable epoxy acrylate compns. showing

good adhesion to substrates)

IT **Polycarbonates**, miscellaneous
Polyesters, miscellaneous
Polyolefins
RL: MSC (Miscellaneous)
(substrate; radiation-curable epoxy acrylate compns. showing good adhesion to substrates)

IT **217805-51-1P**, Epikote 1004 acrylate-Fancryl FA 512A-Fancryl FA 513A copolymer **217805-52-2P**, Epikote 1004 acrylate-Fancryl FA 512A-Fancryl FA 513A-Kayarad R 128H copolymer **217805-53-3P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(radiation-curable epoxy acrylate **compns.** showing good adhesion to substrates)

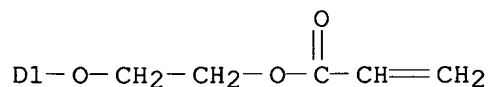
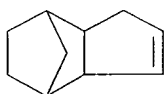
IT 79-10-7D, Acrylic acid, esters, homopolymers 9002-88-4 9003-07-0
RL: MSC (Miscellaneous)
(substrate; radiation-curable epoxy acrylate compns. showing good adhesion to substrates)

IT **217805-51-1P**, Epikote 1004 acrylate-Fancryl FA 512A-Fancryl FA 513A copolymer **217805-52-2P**, Epikote 1004 acrylate-Fancryl FA 512A-Fancryl FA 513A-Kayarad R 128H copolymer **217805-53-3P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(radiation-curable epoxy acrylate **compns.** showing good adhesion to substrates)

RN 217805-51-1 HCAPLUS
CN 2-Propenoic acid, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] 2-propenoate, and octahydro-4,7-methano-1H-inden-5-yl 2-propenoate (9CI) (CA INDEX NAME)

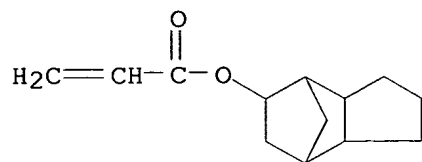
CM 1

CRN 68169-12-0
CMF C15 H20 O3
CCI IDS



CM 2

CRN 7398-56-3
CMF C13 H18 O2



CM 3

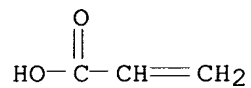
CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 4

CRN 79-10-7

CMF C3 H4 O2



CM 5

CRN 25068-38-6

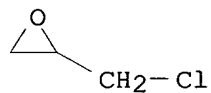
CMF (C15 H16 O2 . C3 H5 Cl O)x

CCI PMS

CM 6

CRN 106-89-8

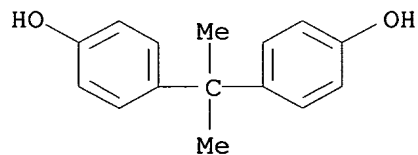
CMF C3 H5 Cl O



CM 7

CRN 80-05-7

CMF C15 H16 O2



RN 217805-52-2 HCAPLUS

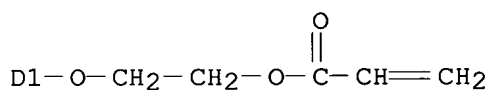
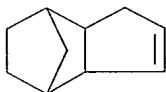
CN 2-Propenoic acid, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] 2-propenoate, 2-hydroxy-3-phenoxypropyl 2-propenoate and octahydro-4,7-methano-1H-inden-5-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 68169-12-0

CMF C15 H20 O3

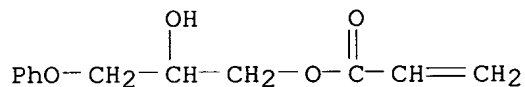
CCI IDS



CM 2

CRN 16969-10-1

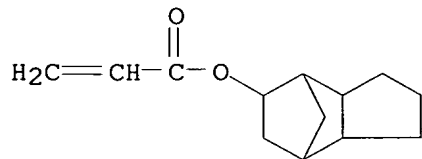
CMF C12 H14 O4



CM 3

CRN 7398-56-3

CMF C13 H18 O2



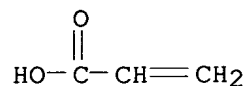
CM 4

CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 5

CRN 79-10-7
CMF C3 H4 O2

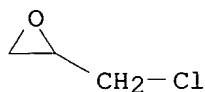


CM 6

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

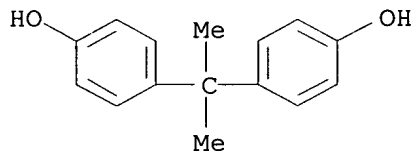
CM 7

CRN 106-89-8
CMF C3 H5 Cl O



CM 8

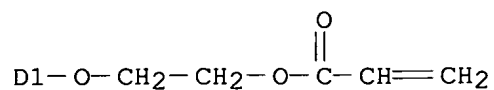
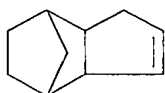
CRN 80-05-7
CMF C15 H16 O2



RN 217805-53-3 HCAPLUS
CN 2-Propenoic acid, (octahydro-4,7-methano-1H-indene-5,?-diyl)bis(methylene) ester, polymer with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol] 2-propenoate, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl 2-propenoate and octahydro-4,7-methano-1H-inden-5-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 68169-12-0
CMF C15 H20 O3
CCI IDS

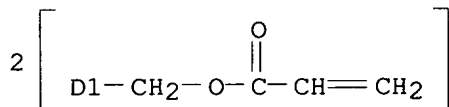
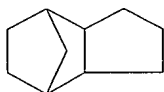


CM 2

CRN 42594-17-2

CMF C18 H24 O4

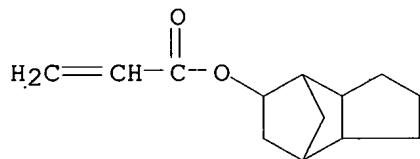
CCI IDS



CM 3

CRN 7398-56-3

CMF C13 H18 O2



CM 4

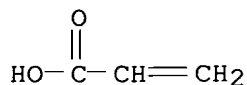
CRN 55818-57-0

CMF (C15 H16 O2 . C3 H5 Cl O)x . x C3 H4 O2

CM 5

CRN 79-10-7

CMF C3 H4 O2

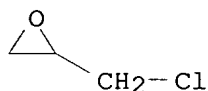


CM 6

CRN 25068-38-6
CMF (C15 H16 O2 . C3 H5 Cl O)x
CCI PMS

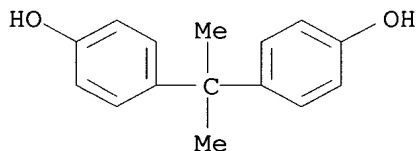
CM 7

CRN 106-89-8
CMF C3 H5 Cl O



CM 8

CRN 80-05-7
CMF C15 H16 O2



L37 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:693653 HCAPLUS

DN 130:18981

TI Photosensitive colored composition and color filter using same

IN Ito, Masahiro; Tani, Mizuhito; Aoki, Mariko

PA Toppan Printing Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|--------------|-----------------|--------------|
| PI | JP 10288837 | A2 | 19981027 | JP 1997-96073 | 19970414 <-- |
| PRAI | JP 1997-96073 | | 19970414 <-- | | |

AB The title composition comprises (a) an acrylic resin based on a copolymer of ≥ 1 selected from iso-bornyl (meth)acrylate, dicyclopentenyl (meth)acrylate, dicyclopentenylloxyethyl (meth)acrylate, tricyclo-(5,2,1,02.6)-decanyl (meth)acrylate, and tricyclo-(5,2,1,02.6)-decanyloxyethyl (meth)acrylate with (meth)acrylic acid, (b) an organic dye,

(c) a photopolymg. monomer, and (d) a photopolymn. initiator. A color filter using the composition is also claimed. A high quality color filter with a thin film black matrix showing high optical d. and low reflectance is obtained using the composition

IC ICM G03F007-027
ICS G02B005-20; G03F007-004; G03F007-028

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST acrylic copolymer photosensitive compn color filter; liq crystal **display** color filter

IT Liquid crystal displays
Optical filters
(photosensitive composition containing acrylic resin for color filter of liquid crystal **display** device)

IT 201152-24-1P, Hydroxymethyl methacrylate-isobornyl methacrylate-methacrylic acid copolymer **216076-87-8P**, Dicyclopentenyl methacrylate-hydroxymethyl methacrylate-methacrylic acid copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive **composition** containing acrylic resin for color filter of liquid crystal **display** device)

IT 5888-33-5D, Iso-bornyl acrylate, acrylic polymers 7398-56-3D, acrylic polymers 12542-30-2D, Dicyclopentenyl acrylate, acrylic polymers 15625-89-5, Trimethylolpropane triacrylate 34759-34-7D, acrylic polymers 68169-03-9D, Dicyclopentenylloxyethyl methacrylate, acrylic polymers 68169-12-0D, Dicyclopentenylloxyethyl acrylate, acrylic polymers 88449-54-1D, acrylic polymers 99353-06-7D, acrylic polymers
RL: TEM (Technical or engineered material use); USES (Uses)
(photosensitive composition containing acrylic resin for color filter of liquid crystal **display** device)

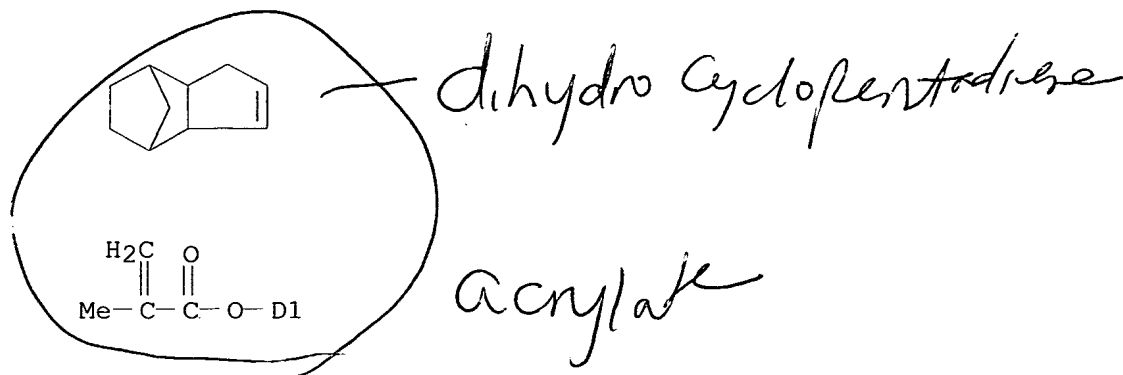
IT **216076-87-8P**, Dicyclopentenyl methacrylate-hydroxymethyl methacrylate-methacrylic acid copolymer
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photosensitive **composition** containing acrylic resin for color filter of liquid crystal **display** device)

RN 216076-87-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl 2-methyl-2-propenoate and hydroxymethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

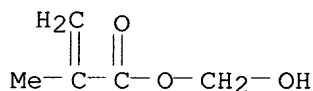
CM 1

CRN 31621-69-9
CMF C14 H18 O2
CCI IDS



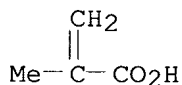
CM 2

CRN 21982-30-9
CMF C5 H8 O3



CM 3

CRN 79-41-4
CMF C4 H6 O2



L37 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:668136 HCAPLUS

DN 129:276941

TI Flame-retardant thermoplastic **polycarbonate** molding compositions having good melt flow, their preparation and their use

IN Weber, Martin; Guntherberg, Norbert

PA BASF A.-G., Germany

SO Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | EP 869150 | A2 | 19981007 | EP 1998-105962 | 19980401 <-- |
| | EP 869150 | A3 | 19990922 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | DE 19714003 | A1 | 19981008 | DE 1997-19714003 | 19970404 |
| PRAI | DE 1997-19714003 | A | 19970404 | <-- | |
| AB | Flame-resistant polycarbonate compns. with good processability, mech. properties, and heat deformation temperature are obtained from | | | | |

polycarbonate 1-93.9, particulate emulsion polymer (glass temperature <10°) 1-93.9, vinyl copolymer 1-93.9, P compound (especially a di- or **polyphosphate** ester) 3-20, antidrip compound 0.1-10, pentaerythritol derivative 1-5, and additives 0-50%, and may be processed into various forms. Thus, a molding composition based on bisphenol A **polycarbonate** 62.4, fine-particle acrylonitrile-Bu acrylate-styrene-tricyclodecenyl acrylate graft copolymer (I) 3.9, coarse-particle I 3.9, acrylonitrile-styrene copolymer 15.4, Fyrolflex RDP 11, Teflon 30N 0.4, and Loxiol G 70S 3 parts had Vicat B temperature 98° and UL 94 rating V-0 45.

- IC ICM C08L069-00
- ICI C08L069-00, C08L025-12, C08L051-04
- CC 37-6 (**Plastics** Manufacture and Processing)
- ST **polycarbonate** compn flame retardant moldable
- IT Fluoropolymers, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (antidrip agent; in flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT Extrusion of plastics and rubbers
 - (blow; of flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT Fatty acids, uses
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (esters, esters with pentaerythritol; lubricant; in flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT **Polycarbonates**, uses
 - Polycarbonates**, uses
 - RL: TEM (Technical or engineered material use); USES (Uses)
 - (fiber; flame-retardant **polycarbonate** molding compns. having good melt flow for)
- IT **Polycarbonates**, uses
 - RL: POF (Polymer in formulation); USES (Uses)
 - (flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT Molding of plastics and rubbers
 - (injection; of flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT Extrusion of plastics and rubbers
 - Extrusion of plastics and rubbers
 - (of flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT Synthetic polymeric fibers, uses
 - Synthetic polymeric fibers, uses
 - RL: TEM (Technical or engineered material use); USES (Uses)
 - (**polycarbonates**; flame-retardant **polycarbonate** molding compns. having good melt flow for)
- IT 9002-84-0, Teflon 30N
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (antidrip agent; in flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT 57583-54-7, Fyrolflex RDP
 - RL: MOA (Modifier or additive use); USES (Uses)
 - (fireproofing agent; in flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT 24936-68-3, Bisphenol A **polycarbonate**, uses 25037-45-0
 - RL: POF (Polymer in formulation); USES (Uses)
 - (flame-retardant **polycarbonate** molding compns. having good melt flow)
- IT 9003-54-7, Acrylonitrile-styrene copolymer **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft

copolymer

RL: MOA (Modifier or additive use); USES (Uses)
(in flame-retardant **polycarbonate** molding compns.
having good melt flow)

IT 115-77-5D, Pentaerythritol, esters 115470-91-2, Loxiol G 70S

RL: MOA (Modifier or additive use); USES (Uses)
(lubricant; in flame-retardant **polycarbonate** molding compns.
having good melt flow)

IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
acrylate graft copolymer

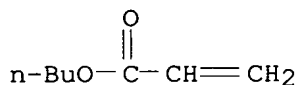
RL: MOA (Modifier or additive use); USES (Uses)
(in flame-retardant **polycarbonate** molding compns.
having good melt flow)

RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
CMF C7 H12 O2



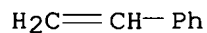
CM 2

CRN 107-13-1
CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8



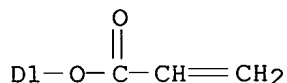
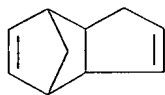
CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2
CCI IDS



L37 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:406000 HCAPLUS

DN 129:96162

TI Preparation of rubber-modified polymeric molding compositions

IN McKee, Graham Edmund; Jungling, Stephan; Warzelhan, Volker; Gausepohl, Hermann

PA BASF A.-G., Germany

SO PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DT **Patent**

LA German

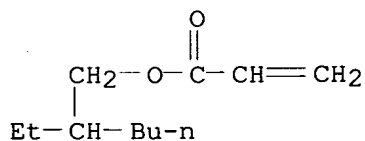
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|--------------|------------------|--------------|
| PI | WO 9825980 | A1 | 19980618 | WO 1997-EP6650 | 19971128 <-- |
| | W: BR, CN, JP, KR, MX, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | DE 19651300 | A1 | 19980618 | DE 1996-19651300 | 19961210 |
| | EP 944656 | A1 | 19990929 | EP 1997-952822 | 19971128 <-- |
| | EP 944656 | B1 | 20010711 | | |
| | R: BE, DE, ES, FR, GB, NL | | | | |
| | JP 2001505942 | T2 | 20010508 | JP 1998-526152 | 19971128 <-- |
| | ES 2161483 | T3 | 20011201 | ES 1997-952822 | 19971128 <-- |
| | TW 381100 | B | 20000201 | TW 1997-86118866 | 19971210 <-- |
| | US 6211297 | B1 | 20010403 | US 1999-319596 | 19990608 <-- |
| | KR 2000057462 | A | 20000915 | KR 1999-705103 | 19990609 <-- |
| PRAI | DE 1996-19651300 | A | 19961210 <-- | | |
| | WO 1997-EP6650 | W | 19971128 <-- | | |

AB In the title process, which requires little or no H2O or conventional solvents, (meth)acrylates and, optionally, comonomers are polymerized anionically in solvents, optionally to block polymers, and the resulting compns., optionally after addition of comonomers, are subjected to radical polymerization. Adding 0.608 g (Me5C5)2Sm.2THF to 113 mL 2-ethylhexyl acrylate, 300 mL styrene, and 2.25 mmol (iso-Bu)3Al at -20°, stirring at 39° for 1 h, terminating polymerization, adding styrene and acrylonitrile (overall content 69 and 23%, resp.) and 0.1% (based on monomers) Bz2O2, stirring at 86° until conversion was 33.5%, adding 0.1 mol% dicumyl peroxide and, after 5 min, 1.0% aqueous Luviskol K 90 containing 0.1% Na **diphosphate** and 0.3% Ertivinol 30/92 (H2O-monomer solution volume ratio 3.3:1), and stirring at 110-140° for 12 h gave a composition forming injection moldings with melt volume index 10 min/21.6 kp and notched impact strength 7.4 and 7.6 kJ/m2 at +23 and -20°, resp.

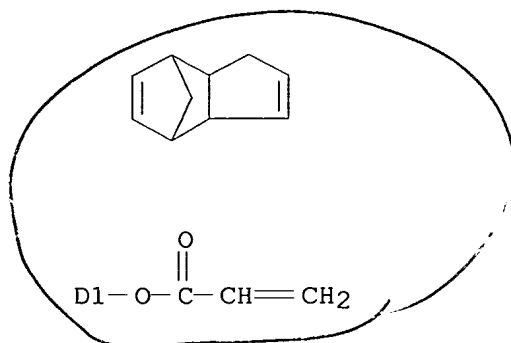
IC ICM C08F265-04

ICS C08L051-00
 CC 37-6 (**Plastics** Manufacture and Processing)
 Section cross-reference(s): 39
 ST rubber modified plastic molding compn; acrylate rubber modified molding
 compn; SAN molding rubber modified; ethylhexyl acrylate rubber molding
 compn; polymn two stage molding compn; anionic polymn molding compn;
 radical polymn molding compn; impact resistant polymer molding
 IT Acrylic rubber
 Molded plastics, preparation
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
 (Preparation); USES (Uses)
 (preparation of rubber-modified polymeric molding compns.)
 IT Polymerization
 (two-stage, anionic-radical; preparation of rubber-modified polymeric
 molding compns.)
 IT 9003-53-6P 9003-54-7P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
 (Preparation); USES (Uses)
 (preparation of rubber-modified polymeric molding compns.)
 IT 9003-77-4P, Poly(2-ethylhexyl acrylate) 58783-62-3P, Allyl
 methacrylate-2-ethylhexyl acrylate copolymer 119786-15-1P, 2-Ethylhexyl
 acrylate-methyl methacrylate block copolymer **128320-66-1P**
 209394-95-6P **209552-13-6P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
 (Preparation); USES (Uses)
 (rubber; preparation of rubber-modified polymeric molding **compns.**)
 IT **128320-66-1P 209552-13-6P**
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PREP
 (Preparation); USES (Uses)
 (rubber; preparation of rubber-modified polymeric molding **compns.**)
 RN 128320-66-1 HCAPLUS
 CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with 3a,4,7,7a,?,?-hexahydro-
 4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)
 CM 1
 CRN 103-11-7
 CMF C11 H20 O2



CM 2
 CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 3
 CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



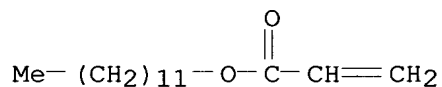
RN 209552-13-6 HCAPLUS

CN 2-Propenoic acid, dodecyl ester, polymer with 2-ethylhexyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2156-97-0

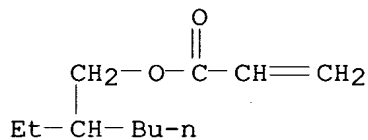
CMF C15 H28 O2



CM 2

CRN 103-11-7

CMF C11 H20 O2



CM 3

CRN 12542-30-2

CMF C13 H16 O2

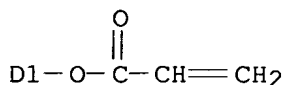
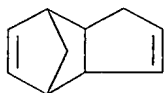
CCI IDS

CM 4

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:163643 HCAPLUS

DN 128:193299

TI Molding compositions consisting of **polycarbonates** and silicone rubber networks

IN Weber, Martin; Guntherberg, Norbert

PA BASF Aktiengesellschaft, Germany; Weber, Martin; Guntherberg, Norbert

SO PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | WO 9808900 | A1 | 19980305 | WO 1997-EP4543 | 19970821 <-- |
| | W: AL, AU, BG, BR, CA, CN, CZ, GE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | DE 19635078 | A1 | 19980305 | DE 1996-19635078 | 19960830 |
| | CA 2263103 | AA | 19980305 | CA 1997-2263103 | 19970821 <-- |
| | AU 9743804 | A1 | 19980319 | AU 1997-43804 | 19970821 <-- |
| | EP 922073 | A1 | 19990616 | EP 1997-941949 | 19970821 <-- |
| | EP 922073 | B1 | 20000315 | | |
| | R: AT, BE, DE, DK, ES, FR, GB, IT, NL, SE, IE, SI | | | | |
| | BR 9711239 | A | 19990817 | BR 1997-11239 | 19970821 <-- |
| | CN 1228799 | A | 19990915 | CN 1997-197556 | 19970821 <-- |
| | AT 190639 | E | 20000415 | AT 1997-941949 | 19970821 <-- |
| | ES 2144879 | T3 | 20000616 | ES 1997-941949 | 19970821 <-- |
| | JP 2001501227 | T2 | 20010130 | JP 1998-511250 | 19970821 <-- |
| | US 6232397 | B1 | 20010515 | US 1999-242733 | 19990222 <-- |
| | KR 2000035951 | A | 20000626 | KR 1999-701692 | 19990227 <-- |
| PRAI | DE 1996-19635078 | A | 19960830 | <-- | |
| | WO 1997-EP4543 | W | 19970821 | <-- | |

AB The molding processability of **polycarbonate**-silicone rubber network blends are improved by addition of a graft polymer based on alkyl acrylates, styrene and unsatd. nitriles, a copolymer based on styrene and unsatd. nitriles, a copolymer comprising at least two different esters of acrylic acid, methacrylic acid or their mixts. These blends are useful for manufacture o moldings, films, or fibers.

IC ICM C08L069-00

ICS C08L069-00; C08L051-04; C08L025-12; C08L051-08; C08L033-06

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 40

ST **polycarbonate** silicone rubber network blend processability;
 fiber **polycarbonate** silicone rubber network blend; film
polycarbonate silicone rubber network blend; molding
polycarbonate silicone rubber network blend; methacrylate
 copolymer blend; unsatd nitrile graft copolymer blend; styrene graft
 copolymer blend; graft acrylate copolymer blend

IT **Polycarbonates**, properties
 RL: DEV (Device component use); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); USES (Uses)
 (aromatic; molding compns. based on **polycarbonates** and silicone
 rubber networks with improved processability)

IT Automobiles
 (bodies; molding compns. based on **polycarbonates** and silicone
 rubber networks with improved processability)

IT Plastic films
 (molding compns. based on **polycarbonates** and silicone rubber
 networks with improved processability)

IT Silicone rubber, properties
 RL: DEV (Device component use); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); USES (Uses)
 (molding compns. based on **polycarbonates** and silicone rubber
 networks with improved processability)

IT Molded plastics, properties
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (molding compns. based on **polycarbonates** and silicone rubber
 networks with improved processability)

IT Polymer blends
 RL: DEV (Device component use); PRP (Properties); TEM (Technical or
 engineered material use); USES (Uses)
 (molding compns. based on **polycarbonates** and silicone rubber
 networks with improved processability)

IT Synthetic polymeric fibers, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (molding compns. based on **polycarbonates** and silicone rubber
 networks with improved processability)

IT 9003-54-7, SAN 24936-68-3, Bisphenol A **polycarbonate**,
 properties 25037-45-0 **106912-44-1**, Acrylonitrile-butyl
 acrylate-styrene-tricyclodecenyl acrylate graft copolymer 149718-92-3,
 Metablen S2001
 RL: DEV (Device component use); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); USES (Uses)
 (molding compns. based on **polycarbonates** and
 silicone rubber networks with improved processability)

IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: DEV (Device component use); POF (Polymer in formulation); PRP
 (Properties); TEM (Technical or engineered material use); USES (Uses)
 (molding compns. based on **polycarbonates** and
 silicone rubber networks with improved processability)

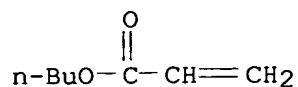
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

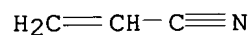
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CM 2

CRN 107-13-1

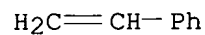
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

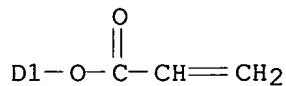
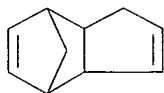
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:87787 HCAPLUS

DN 128:141734

TI Housings from thermoplastic molding compositions for devices suitable for
information processing and transmission

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------|------|----------|------------------|--------------|
| PI | DE 19630144 | A1 | 19980129 | DE 1996-19630144 | 19960725 |
| | WO 9804630 | A1 | 19980205 | WO 1997-EP4024 | 19970724 <-- |

W: CN, JP, KR, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI DE 1996-19630144 A 19960725 <--

AB ABS-free moldings with good light resistance, stiffness, and toughness for the title use are manufactured from compns. containing emulsion-prepared polymer

powder (glass temperature <0°, particle size 50-1000 µm) 1-99, ≥1 amorphous or partially crystalline polymer 1-99, **polycarbonate** 0-50, and fibrous or particulate filler 0-50%. A typical composition contained 10:98:30:2 acrylonitrile (I)-Bu acrylate-styrene-tricyclodecenyl acrylate graft copolymer (II) 25, 5:98:2:35 II 5, 35:65 I-styrene copolymer (III) (viscosity number 80 cm³/g) 5, and III (viscosity number 60 cm³/g) 65 parts.

IC ICM C08L051-04

ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00

ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44; H04M001-02

ICI C08F265-04, C08F212-08, C08F212-12, C08F220-18, C08F220-44

CC 38-3 (**Plastics** Fabrication and Uses)

Section cross-reference(s): 37

ST computer housing light resistant thermoplastic; telecommunication equipment housing light resistant thermoplastic; styrene copolymer blend computer housing; tricyclodecenyl acrylate copolymer blend computer housing; butyl acrylate copolymer blend computer housing; acrylonitrile copolymer blend computer housing; ABS free thermoplastic computer housing

IT Computers

Fillers

(ABS-free, light-resistant housings from thermoplastic molding compns. for devices suitable for information processing and transmission)

IT Polymer blends

RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)

(ABS-free, light-resistant housings from thermoplastic molding compns. for devices suitable for information processing and transmission)

IT Molded plastics, uses

RL: DEV (Device component use); PRP (Properties); USES (Uses)

(ABS-free, light-resistant housings from thermoplastic molding compns. for devices suitable for information processing and transmission)

IT **Polycarbonates**, uses

RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)

(blends; ABS-free, light-resistant housings from thermoplastic molding compns. for devices suitable for information processing and transmission)

IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer

in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (blends; ABS-free, light-resistant housings from thermoplastic molding
compns. for devices suitable for information processing and
 transmission)

IT 9003-54-7, Acrylonitrile-styrene copolymer

RL: DEV (Device component use); POF (Polymer in formulation); PRP
 (Properties); USES (Uses)

(blends; ABS-free, light-resistant housings from thermoplastic molding
 compns. for devices suitable for information processing and
 transmission)

IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer
 in formulation); PRP (Properties); PREP (Preparation); USES (Uses)

(blends; ABS-free, light-resistant housings from thermoplastic molding
compns. for devices suitable for information processing and
 transmission)

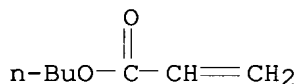
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

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CRN 141-32-2

CMF C7 H12 O2



CM 2

CRN 107-13-1

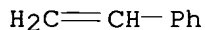
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CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

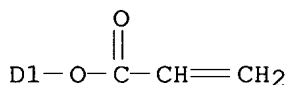
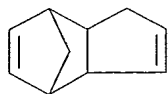
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:87786 HCAPLUS

DN 128:141733

TI Housing and coverings for medical devices from thermoplastic molding compositions

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|--------------|
| PI | DE 19630143 | A1 | 19980129 | DE 1996-19630143 | 19960725 |
| | WO 9804624 | A1 | 19980205 | WO 1997-EP4033 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 914375 | A1 | 19990512 | EP 1997-936654 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | KR 2000029501 | A | 20000525 | KR 1999-700535 | 19990123 <-- |
| PRAI | DE 1996-19630143 | A | 19960725 | <-- | |
| | WO 1997-EP4033 | W | 19970724 | <-- | |

AB ABS-free moldings with good chemical- and light resistance for the title use are manufactured from compns. containing emulsion-prepared polymer powder (glass

temperature <0°, particle size 50-1000 µm) 1-99, ≥1 amorphous or partially crystalline polymer 1-99, **polycarbonate** 0-50, and fibrous or particulate filler 0-50%. A typical composition contained 42 parts 10:98:2:30 acrylonitrile (I)-Bu acrylate-styrene-tricyclodeceny acrylate graft copolymer, and 58 parts 35:65 I-styrene copolymer (viscosity number 80 cm³/g).

IC ICM C08L051-04

ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00

ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44

ICI C08F265-04, C08F212-08, C08F212-12, C08F220-18, C08F220-44

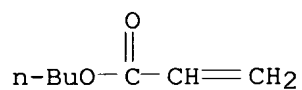
CC 38-3 (**Plastics** Fabrication and Uses)

Section cross-reference(s): 37

- ST medical device housing light resistant thermoplastic; filler copolymer blend medical device housing; **polycarbonate** blend medical device housing; tricyclodecenyl acrylate copolymer medical device housing; styrene copolymer blend medical device housing; butyl acrylate copolymer medical device housing; acrylonitrile copolymer blend medical device housing; ABS free thermoplastic medical device housing; chem resistant thermoplastic medical device housing
- IT Diagnosis
(apparatus; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT **Polycarbonates**, uses
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(blends, in claims; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT Chemically resistant materials
Dialyzers
Light-resistant materials
Respirators
(housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT Polymer blends
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT Molded plastics, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT Fillers
(in claims; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT Drug delivery systems
(infusion apparatus; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT **106912-44-1P**, Acrylonitrilebutyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(blends; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding **compns.**)
- IT 9003-54-7, Acrylonitrile-styrene copolymer
RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
(blends; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding compns.)
- IT **106912-44-1P**, Acrylonitrilebutyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(blends; housing and coverings for medical devices from chemical- and light-resistant ABS-free thermoplastic molding **compns.**)
- RN 106912-44-1 HCAPLUS
- CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

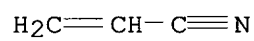
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CRN 141-32-2
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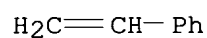
CM 2

CRN 107-13-1
CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8

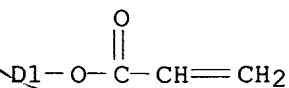
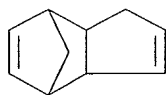


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



AN 1998:87785 HCAPLUS
 DN 128:141732
 TI Massage device and housing for it from a thermoplastic molding composition
 IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel,
 Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau,
 Bernhard; Endemann, Ulrich; Straube, Burkhard
 PA BASF A.-G., Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX
 DT **Patent**
 LA German
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|--------------|
| PI | DE 19630142 | A1 | 19980129 | DE 1996-19630142 | 19960725 |
| | WO 9804232 | A1 | 19980205 | WO 1997-EP4025 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 923362 | A1 | 19990623 | EP 1997-934537 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | KR 2000029507 | A | 20000525 | KR 1999-700541 | 19990123 <-- |
| PRAI | DE 1996-19630142 | A | 19960725 | <-- | |
| | WO 1997-EP4025 | W | 19970724 | <-- | |
| AB | ABS-free moldings with good chemical and light resistance for the title use are manufactured from compns. containing emulsion-prepared polymer powder (glass temperature <0°, particle size 50-1000 µm) 1-99, ≥1 amorphous or partially crystalline polymer 1-99, polycarbonate 0-50, and fibrous or particulate filler 0-50%. A typical composition contained 42 parts 10:98:30:2 acrylonitrile (I)-Bu acrylate-styrene-tricyclodeceny acrylate graft copolymer, and 58 parts 35:65 I-styrene copolymer (viscosity number 80 cm ³ /g). | | | | |
| IC | ICM C08L051-04 ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00; A61H037-00 | | | | |
| ICA | C08F255-00; C08F283-12; C08F212-08; C08F220-44 | | | | |
| ICI | C08F265-04; C08F212-08; C08F212-12; C08F220-18; C08F220-44 | | | | |
| CC | 38-3 (Plastics Fabrication and Uses) Section cross-reference(s): 37 | | | | |
| ST | massage device housing chem resistant thermoplastic; filler copolymer blend massage device housing; polycarbonate blend massage device housing; ABS free thermoplastic massage device housing; styrene copolymer blend massage device housing; tricyclodeceny acrylate copolymer massage device housing; butyl acrylate copolymer massage device housing; acrylonitrile copolymer blend massage device housing; light resistant thermoplastic massage device housing | | | | |
| IT | Polycarbonates , uses RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses) (blends, in claims; massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.) | | | | |
| IT | Fillers (in claims; massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.) | | | | |
| IT | Chemically resistant materials Light-resistant materials (massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.) | | | | |
| IT | Polymer blends | | | | |

RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.)

IT Molded plastics, uses
 RL: DEV (Device component use); PRP (Properties); USES (Uses)
 (massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.)

IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (blends; massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding **compns.**)

IT 9003-54-7, Acrylonitrile-styrene copolymer
 RL: DEV (Device component use); POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends; massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding compns.)

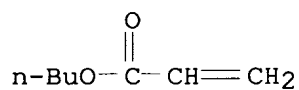
IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
 RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (blends; massage device and housing for it from chemical- and light-resistant ABS-free thermoplastic molding **compns.**)

RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



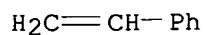
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8

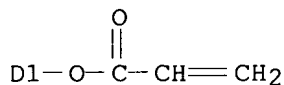
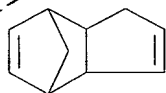


CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



L37 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:87783 HCAPLUS

DN 128:141730

TI Toy vehicle for children from thermoplastic molding compositions

IN Naarmann, Herbert; McKee, Graham Edmund; Pirker, Alfred; Sterzel,
 Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau,
 Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | DE 19630135 | A1 | 19980129 | DE 1996-19630135 | 19960725 |
| | WO 9804329 | A1 | 19980205 | WO 1997-EP4030 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI | DE 1996-19630135 | A | 19960725 | <-- | |
| AB | ABS-free moldings with good weather resistance, stiffness, and toughness for the title use are manufactured from compns. containing emulsion-prepared polymer | | | | |

powder (glass temperature <0°, particle size 50-1000 µm) 1-99,
 ≥1 amorphous or partially crystalline polymer 1-99,
polycarbonate 0-50, and fibrous or particulate filler 0-50%. A
 typical composition contained 10:98:30:2 acrylonitrile (I)-Bu
 acrylate-styrene-tricyclodecyl acrylate graft copolymer (II) 25,
 5:98:35:2 II 10, 35:65 I-styrene copolymer (III) (viscosity number 80 cm³/g)

10, and III (viscosity number 60 cm³/g) 55 parts.

IC ICM C08L051-04
ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00;
A63H017-00

ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44

ICI C08F265-04, C08F212-08, C08F212-12, C08F220-18, C08F220-44

CC 38-3 (**Plastics** Fabrication and Uses)
Section cross-reference(s): 37

ST toy vehicle weather resistant thermoplastic; ABS free weather resistant
toy vehicle; filler copolymer blend toy vehicle; **polycarbonate**
blend toy vehicle; styrene copolymer blend toy vehicle; butyl acrylate
copolymer blend toy vehicle; tricyclodeceny acrylate copolymer blend toy
vehicle; acrylonitrile copolymer blend toy vehicle

IT **Polycarbonates**, uses
RL: DEV (Device component use); USES (Uses)
(blends, in claims; weather-resistant ABS-free toy vehicles for
children from thermoplastic molding compns.)

IT Fillers
(in claims; weather-resistant ABS-free toy vehicles for children from
thermoplastic molding compns.)

IT Toys
Vehicles
(weather-resistant ABS-free toy vehicles for children from
thermoplastic molding compns.)

IT Polymer blends
RL: DEV (Device component use); POF (Polymer in formulation); PRP
(Properties); USES (Uses)
(weather-resistant ABS-free toy vehicles for children from
thermoplastic molding compns.)

IT Molded plastics, uses
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(weather-resistant ABS-free toy vehicles for children from
thermoplastic molding compns.)

IT **106912-44-1P**
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer
in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(blends; weather-resistant ABS-free toy vehicles for children from
thermoplastic molding **compns.**)

IT 9003-54-7, Acrylonitrile-styrene copolymer
RL: DEV (Device component use); POF (Polymer in formulation); PRP
(Properties); USES (Uses)
(weather-resistant ABS-free toy vehicles for children from
thermoplastic molding compns.)

IT **106912-44-1P**
RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer
in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(blends; weather-resistant ABS-free toy vehicles for children from
thermoplastic molding **compns.**)

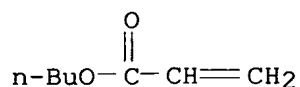
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

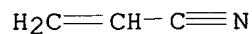
CMF C7 H12 O2



CM 2

CRN 107-13-1

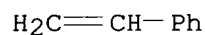
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

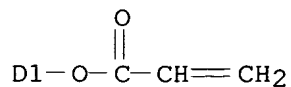
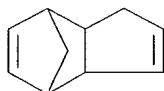
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:79765 HCAPLUS

DN 128:128735

TI Thermoplastic molding compositions for components of flat walls

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

SO Ger. Offen., 16 pp.
CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | DE 19630118 | A1 | 19980129 | DE 1996-19630118 | 19960725 |
| | WO 9804633 | A2 | 19980205 | WO 1997-EP4034 | 19970724 <-- |
| | WO 9804633 | A3 | 19980305 | | |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 914384 | A2 | 19990512 | EP 1997-935546 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | KR 2000029520 | A | 20000525 | KR 1999-700570 | 19990123 <-- |
| | US 6197872 | B1 | 20010306 | US 1999-230348 | 19991217 <-- |
| PRAI | DE 1996-19630118 | A | 19960725 | <-- | |
| | WO 1997-EP4034 | W | 19970724 | <-- | |
| AB | The title compns., with low d. and good resistance to scratches and chems., contain emulsion polymers (glass temperature <0°, average particle size 50-1000 nm) 1-99, amorphous or partially crystalline polymers 1-99, polycarbonates 0-50, and fibrous or particulate fillers 0-50%. A mixture of 42% core-shell graft copolymer (prepared from 60 parts 98:1.8 mixture of Bu acrylate and dihydrodicyclopentadienyl acrylate and 40 parts 75:25 styrene-acrylonitrile mixture) and 58 parts 65:35 SAN (viscosity number 80 mL/g) had d. 1.07; vs. 1.38 for PVC. | | | | |
| IC | ICM C08L051-04 | | | | |
| | ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00; E04C002-20; E04B002-00 | | | | |
| ICA | C08F255-00; C08F283-12; C08F212-08; C08F220-44 | | | | |
| ICI | C08F265-04, C08F212-08, C08F212-12, C08F220-18, C08F220-44 | | | | |
| CC | 37-6 (Plastics Manufacture and Processing) | | | | |
| | Section cross-reference(s): 38 , 58 | | | | |
| ST | blend plastic wall component; acrylate copolymer blend wall; styrene copolymer blend wall; acrylonitrile copolymer blend wall; graft polymer blend wall; dihydrodicyclopentadienyl acrylate copolymer blend | | | | |
| IT | Walls (construction) | | | | |
| | (thermoplastic molding compns. for components of flat walls) | | | | |
| IT | Acrylic rubber | | | | |
| | EPDM rubber | | | | |
| | Ethylene-propylene rubber | | | | |
| | Polymer blends | | | | |
| | Silicone rubber, uses | | | | |
| | RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) | | | | |
| | (thermoplastic molding compns. for components of flat walls) | | | | |
| IT | Swimming pools | | | | |
| | (thermoplastic molding compns. for components of walls of swimming pools) | | | | |
| IT | 106912-44-1 , Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer | | | | |
| | RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) | | | | |
| | (core-shell; thermoplastic molding compns. for components of flat walls) | | | | |
| IT | 9010-79-1 | | | | |
| | RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) | | | | |

(ethylene-propylene rubber, thermoplastic molding compns. for components of flat walls)

IT 9003-54-7
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (thermoplastic molding compns. for components of flat walls)

IT 106912-44-1, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (core-shell; thermoplastic molding **compns.** for components of flat walls)

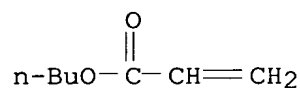
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

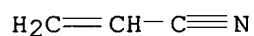
CMF C7 H12 O2



CM 2

CRN 107-13-1

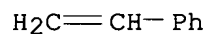
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

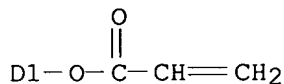
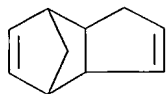
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:79764 HCAPLUS

DN 128:141509

TI Thermoplastic molding compositions for housings for safety devices

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 16 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|--------------|
| PI | DE 19630117 | A1 | 19980129 | DE 1996-19630117 | 19960725 |
| | WO 9804625 | A1 | 19980205 | WO 1997-EP4029 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 914376 | A1 | 19990512 | EP 1997-940023 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | US 6063868 | A | 20000516 | US 1999-230320 | 19990122 <-- |
| | KR 2000029522 | A | 20000525 | KR 1999-700574 | 19990123 <-- |
| PRAI | DE 1996-19630117 | A | 19960725 | <-- | |
| | WO 1997-EP4029 | W | 19970724 | <-- | |

AB The title compns., with good stability and resistance to scratches and yellowing, contain emulsion polymers (glass temperature <0°, average particle size 50-1000 nm) 1-99, amorphous or partially crystalline polymers 1-99, **polycarbonates** 0-50, and fillers 0-50%. A blend of emulsion graft polymer (prepared from 98:2 Bu acrylate-dihydrodicyclopentadienyl acrylate 60 and 75:25 styrene-acrylonitrile 40 parts) 25, a similar polymer (prepared with 35:5 styrene-acrylonitrile) 10, 65:35 SAN (viscosity number 80 mL/g) 10, and 65:35 SAN (viscosity number 60 mL/g) 55 parts had yellowing after 2500 h sun exposure 7, penetration work after 12 wk 30 N-m, and gloss after 40 wk 84%; vs. 33, 3, and <20, resp., for graft ABS.

IC ICM C08L051-04

ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00; G08B007-00; G08B023-00

ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44

ICI C08F265-04, C08F212-08, C08F220-18, C08F212-12, C08F220-44

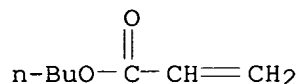
CC 37-6 (Plastics Manufacture and Processing)

ST blend polymer housing safety device; graft polymer blend housing; SAN blend housing safety device; acrylate graft polymer blend; acrylonitrile graft polymer blend; styrene graft polymer blend; weather resistant

polymer blend
 IT Safety devices
 (housings; thermoplastic molding compns. for housings for safety devices)
 IT Polymer blends
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (thermoplastic molding compns. for housings for safety devices)
 IT Weathering
 (thermoplastic molding compns. resistant to weathering for housings for safety devices)
 IT 9003-54-7 **106912-44-1**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (thermoplastic molding **compns.** for housings for safety devices)
 IT **106912-44-1**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (thermoplastic molding **compns.** for housings for safety devices)
 RN 106912-44-1 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



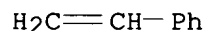
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8

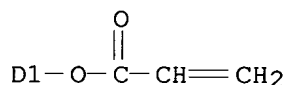
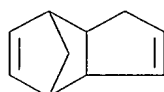


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L37 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:79763 HCAPLUS

DN 128:128913

TI Non-ABS thermoplastic molding compositions for rear spoilers

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|------------------|--------------|
| PI | DE 19630116 | A1 | 19980129 | DE 1996-19630116 | 19960725 |
| | WO 9804449 | A1 | 19980205 | WO 1997-EP4028 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 912389 | A1 | 19990506 | EP 1997-936653 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| PRAI | DE 1996-19630116 | A | 19960725 | <-- | |
| | WO 1997-EP4028 | W | 19970724 | <-- | |

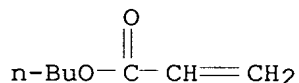
AB Molding compns. for automobile rear spoilers are based on emulsion graft polymer with glass transition temperature <0° and particle size 50-500 nm 25-50, amorphous or partially crystalline polymer 50-75, **polycarbonate** 0-50, and fibrous or particulate filler 0-50%. These compns. do not require fiber reinforcement or paint and have good weathering resistance. Examples using acrylonitrile-Bu acrylate-styrene-tricyclodecenyl acrylate graft polymer as the first component and either acrylonitrile-styrene copolymer or acrylonitrile- α -methylstyrene copolymer as the second component are given.

IC ICM C08L051-04

ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00;
 B62D029-04; B62D037-02; B62D035-00
 ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44
 ICI C08F265-04, C08F212-08, C08F220-18, C08F212-12, C08F220-44
 CC 38-3 (**Plastics** Fabrication and Uses)
 Section cross-reference(s): 37
 ST thermoplastic compn automotive rear spoiler
 IT Polymer blends
 RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
 (in thermoplastic molding compns. for rear spoilers)
 IT Automobiles
 (spoilers, rear; thermoplastic molding compns. for)
 IT 9003-54-7, Acrylonitrile-styrene copolymer 25747-74-4,
 Acrylonitrile- α -methylstyrene copolymer **106912-44-1**,
 Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft
 polymer
 RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
 (in thermoplastic molding **compns.** for rear spoilers)
 IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft polymer
 RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
 (in thermoplastic molding **compns.** for rear spoilers)
 RN 106912-44-1 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



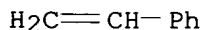
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8

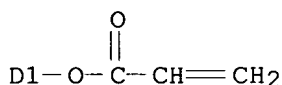
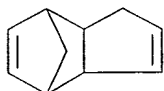


CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



L37 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:79762 HCAPLUS

DN 128:128734

TI Thermoplastic molding compositions for thermally insulated containers for transportation

IN Naarmann, Herbert; MacKee, Graham Edmund; Pirker, Alfred; Sterzel, Hans-Josef; Brandstetter, Franz; Von Bernstorff, Bernd-Steffen; Rosenau, Bernhard; Endemann, Ulrich; Straube, Burkhard

PA BASF A.-G., Germany

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|--------------|------------------|--------------|
| PI | DE 19630103 | A1 | 19980129 | DE 1996-19630103 | 19960725 |
| | WO 9804463 | A1 | 19980205 | WO 1997-EP4037 | 19970724 <-- |
| | W: CN, JP, KR, US | | | | |
| | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| | EP 923494 | A1 | 19990623 | EP 1997-940025 | 19970724 <-- |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| PRAI | DE 1996-19630103 | A | 19960725 <-- | | |
| | WO 1997-EP4037 | W | 19970724 <-- | | |

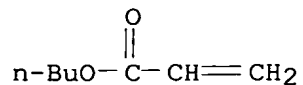
AB The title comps., with good dimensional and shape stability, contain emulsion polymers [glass temperature <0°, average particle size (D) 50-1000 nm] 1-99, amorphous or partially crystalline polymers 1-99, **polycarbonates** 0-50, and fibrous or particulate fillers 0-50%. A mixture of core/shell graft copolymer (I) (prepared from 60 parts 98:2 Bu acrylate-dihydrodicyclopentadienyl acrylate and 40 parts 75:25 styrene-acrylonitrile) 25, I prepared with 20 parts styrene and 20 parts 75:25 styrene-acrylonitrile (D 490 nm) 10, and 65:35 SAN (viscosity number 80 and 60 mL/g) 10 and 55 parts, resp., had work-to-penetration after 0, 0.5, 1, and 2 yr at 80° 36, 33, 32, and 29 N-m, resp.; elastic modulus

2300 and 2100 MPa at 23 and 50°, resp.; and heat distortion temperature at 1.8 and 0.45° 97 and 101°, resp.

IC ICM C08L051-04
ICS C08L051-08; C08L025-02; C08L033-06; C08L033-20; C08L069-00
ICA C08F255-00; C08F283-12; C08F212-08; C08F220-44; B65D001-10; B01L011-02
ICI C08F265-04, C08F212-08, C08F212-12, C08F220-18, C08F220-44
CC 37-6 (**Plastics** Manufacture and Processing)
Section cross-reference(s): **38**
ST blend plastic container insulated; transport container thermal insulation; SAN blend container insulated; acrylate copolymer blend container; acrylonitrile copolymer blend container; styrene copolymer blend container; graft copolymer blend container
IT Containers
Thermal insulators
Transportation
(thermoplastic molding compns. for thermally insulated containers for transportation)
IT Acrylic rubber
EPDM rubber
Ethylene-propylene rubber
Polymer blends
Silicone rubber, uses
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastic molding compns. for thermally insulated containers for transportation)
IT **106912-44-1**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(core-shell; thermoplastic molding **compns.** for thermally insulated containers for transportation)
IT 9010-79-1
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(ethylene-propylene rubber, thermoplastic molding compns. for thermally insulated containers for transportation)
IT 9003-54-7
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(thermoplastic molding compns. for thermally insulated containers for transportation)
IT **106912-44-1**, Acrylonitrile-butyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
(core-shell; thermoplastic molding **compns.** for thermally insulated containers for transportation)
RN 106912-44-1 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

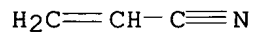
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CMF C7 H12 O2



CM 2

CRN 107-13-1

CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

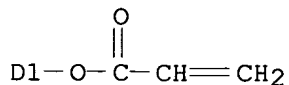
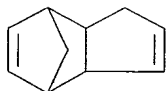
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1998:38344 HCAPLUS
 DN 128:102913
 TI Flame-resistant, thermoplastic molding compositions
 IN Weber, Martin; Massonne, Klemens
 PA BASF A.-G., Germany
 SO Ger. Offen., 14 pp.
 CODEN: GWXXBX

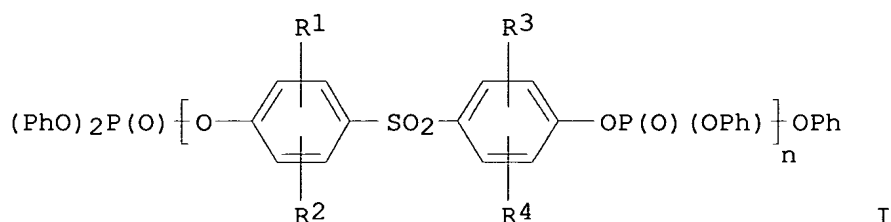
DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|------------------|--------------|
| PI | DE 19626156 | A1 | 19980108 | DE 1996-19626156 | 19960628 |
| | EP 816434 | A1 | 19980107 | EP 1997-110590 | 19970627 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 10060246 | A2 | 19980303 | JP 1997-173753 | 19970630 <-- |
| PRAI | DE 1996-19626156 | A | 19960628 | <-- | |

GI



- AB **Polyphosphate** esters I (R1-4 = H or C1-5 alkyl, n = 1-5) are useful optionally with other **polyphosphate** esters different from I as fireproofing agents for blends containing ≥ 1 halogen-free aromatic **polycarbonate**, ≥ 1 halogen-free, rubbery graft polymer, and ≥ 1 halogen-free, thermoplastic aromatic vinyl copolymer.
- IC ICM C08L069-00
ICS C08L051-04; C08L025-08; C08K005-521
- CC 37-6 (**Plastics** Manufacture and Processing)
- ST polysulfone **polyphosphate** ester fireproofing agent;
polycarbonate rubber blend fireproofing agent; arom vinyl polymer blend fireproofing agent
- IT Acrylic rubber
Synthetic rubber, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(acrylonitrile-Bu acrylate-styrene-tricyclodecanyl acrylate, graft; flame-resistant, thermoplastic molding compns. containing sulfur-containing **polyphosphate** esters)
- IT **Polycarbonates**, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(aromatic; flame-resistant, thermoplastic molding compns. containing sulfur-containing **polyphosphate** esters)
- IT Fireproofing agents
(flame-resistant, thermoplastic molding compns. containing sulfur-containing **polyphosphate** esters)
- IT Polymer blends
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(flame-resistant, thermoplastic molding compns. containing sulfur-containing **polyphosphate** esters)
- IT ABS rubber
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(graft; flame-resistant, thermoplastic molding compns. containing sulfur-containing **polyphosphate** esters)
- IT Polysulfones, preparation
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP

(Preparation); USES (Uses)
 (polyphosphate ester-; flame-resistant, thermoplastic molding
 compns. containing sulfur-containing polyphosphate esters)

IT 106677-58-1
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (abs rubber, graft; flame-resistant, thermoplastic molding compns.
 containing sulfur-containing polyphosphate esters)

IT 57583-54-7, Fyrolflex RDP
 RL: MOA (Modifier or additive use); USES (Uses)
 (cofireproofing agent; flame-resistant, thermoplastic molding compns.
 containing sulfur-containing polyphosphate esters)

IT 80-09-1, Bisphenol S 2524-64-3, Diphenyl chlorophosphate
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (fireproofing agent precursor; flame-resistant, thermoplastic molding
 compns. containing sulfur-containing polyphosphate esters)

IT 115372-48-0P 201424-43-3P
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
 (Preparation); USES (Uses)
 (flame-resistant, thermoplastic molding compns. containing sulfur-containing
 polyphosphate esters)

IT 9003-54-7, Acrylonitrile-styrene copolymer 24936-68-3, Bisphenol A
 polycarbonate, properties 25037-45-0
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (flame-resistant, thermoplastic molding compns. containing sulfur-containing
 polyphosphate esters)

IT 106677-58-1, ABS graft copolymer 106912-44-1,
 Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft
 copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (rubber; flame-resistant, thermoplastic molding compns.
 containing sulfur-containing polyphosphate esters)

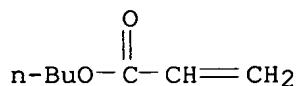
IT 106912-44-1, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (rubber; flame-resistant, thermoplastic molding compns.
 containing sulfur-containing polyphosphate esters)

RN 106912-44-1 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

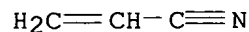
CMF C7 H12 O2



CM 2

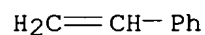
CRN 107-13-1

CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8

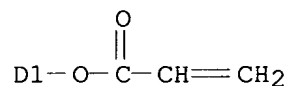
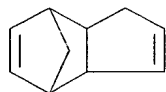


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L37 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:491570 HCAPLUS

DN 127:109718

TI Molding compositions from **polycarbonates**

IN Weber, Martin; Weiss, Robert; Guentherberg, Norbert; Massonne, Klemens;
Seibring, Joachim; Zimmer, Guenther

PA BASF A.-G., Germany

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

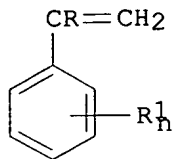
DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------------------|------|----------|------------------|--------------|
| PI | EP 780438 | A2 | 19970625 | EP 1996-119758 | 19961210 <-- |
| | EP 780438 | A3 | 19990113 | | |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | DE 19547884 | A1 | 19970626 | DE 1995-19547884 | 19951221 |
| | US 5969016 | A | 19991019 | US 1996-772127 | 19961220 <-- |
| PRAI | DE 1995-19547884 | A | 19951221 | <-- | |

GI

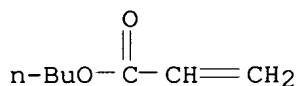


- AB Compns. providing moldings with good heat-deformation and impact resistance contain (a) 5-97.9% **polycarbonate** (weight-average mol. weight 10,000-64,000), (b) 1-93.9% a graft copolymer based on 40-80% rubber grafting base with glass temperature $<10^{\circ}$ and 20-60% grafting monomers containing 50-95% ≥ 1 of aromatic vinyl compound I ($R = H$ or C1-8 alkyl, $R_1 =$ C1-8 alkyl, $n = 0-3$), C1-8 alkyl acrylate, and C1-8 alkyl C1-8 alkacrylate, and 5-50% ≥ 1 of acrylonitrile (II), C1-8 alkacrylonitrile, and C1-8 alkyl C1-8 alkacrylate, (c) 1-93.9% copolymer of ≥ 1 of I, C1-8 alkyl acrylate, and C1-8 alkyl C1-8 alkacrylate and ≥ 1 of II and C1-8 alkacrylonitrile, and (d) 0.01-10% polyhydroxy ether from ≥ 1 diol and epichlorohydrin (III). A typical composition contained bisphenol A (IV) **polycarbonate** 63.6, 98:2 Bu acrylate-tricyclodecenyl acrylate copolymer grafted with 75:25 styrene-I mixture 7.9, 25:75 I-styrene copolymer 15.8, IV-III copolymer 1, Ph3PO4 11, resorcinol di-Ph **phosphate** 0.3, and lubricant 0.4%.
- IC ICM C08L069-00
ICS C08L051-04; C08L025-12
- CC 37-6 (**Plastics** Manufacture and Processing)
- ST impact resistant bisphenol A **polycarbonate** blend; heat deformation resistant **polycarbonate** blend; epoxy resin bisphenol A blend **polycarbonate**; acrylonitrile grafted acrylate rubber blend **polycarbonate**; styrene grafted acrylate rubber blend **polycarbonate**
- IT Impact-resistant materials
Impact-resistant materials
(heat-resistant; molding compns. from **polycarbonate**, grafted rubbers, acrylonitrile-styrene copolymers, and epoxy resins)
- IT Heat-resistant materials
Heat-resistant materials
(impact-resistant; molding compns. from **polycarbonate**, grafted rubbers, acrylonitrile-styrene copolymers, and epoxy resins)
- IT Epoxy resins, properties
Polycarbonates, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(molding compns. from **polycarbonate**, grafted rubbers, acrylonitrile-styrene copolymers, and epoxy resins)
- IT Polymer blends
RL: PRP (Properties)
(molding compns. from **polycarbonate**, grafted rubbers, acrylonitrile-styrene copolymers, and epoxy resins)
- IT 106677-58-1P, Acrylonitrile-butadiene-styrene graft copolymer
106912-44-1P, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(molding compns. from **polycarbonate**, grafted rubbers, acrylonitrile-styrene copolymers, and epoxy resins)

IT 9003-54-7, Acrylonitrile-styrene copolymer 24936-68-3, Bisphenol A
polycarbonate, properties 25037-45-0 25068-38-6, Bisphenol
 A-epichlorohydrin copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (molding compns. from **polycarbonate**, grafted rubbers,
 acrylonitrile-styrene copolymers, and epoxy resins)
 IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
 (Properties); PREP (Preparation); USES (Uses)
 (molding **compns.** from **polycarbonate**, grafted
 rubbers, acrylonitrile-styrene copolymers, and epoxy resins)
 RN 106912-44-1 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2
 CMF C7 H12 O2



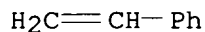
CM 2

CRN 107-13-1
 CMF C3 H3 N



CM 3

CRN 100-42-5
 CMF C8 H8



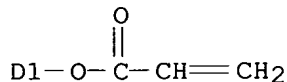
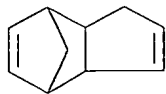
CM 4

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 5

CRN 50976-02-8
 CMF C13 H14 O2

CCI IDS



L37 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:449879 HCAPLUS

DN 127:82253

TI Thermoplastic molding compositions containing **polycarbonates** and graft and nongraft copolymers of styrene (derivatives)

IN Ruppimich, Karl; Seibring, Joachim; Weber, Martin; Fischer, Wolfgang

PA BASF A.-G., Germany

SO Ger. Offen., 12 pp.

CODEN: GWXXBX

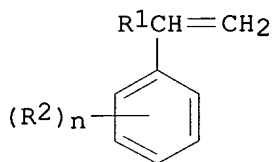
DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|------------------|--------------|
| PI | DE 19542619 | A1 | 19970522 | DE 1995-19542619 | 19951115 <-- |
| PRAI | DE 1995-19542619 | | 19951115 | <-- | |

GI



I

AB Compns. with good colorability that give thermoplastic moldings with good chemical resistance, toughness at elevated temps., heat-deformation resistance, and crack resistance under impact stress contain (A) 10-40% ≥ 1 **polycarbonate**, (B) 5-40% graft copolymer mixture containing (B1) graft copolymer with average particle size 200-700 nm prepared from 40-80% grafting base polymer with glass temperature $<10^\circ$, 5-20% grafting layer from aromatic vinyl compds. I ($R_1 = \text{H}$ or C1-8 alkyl, $R_2 = \text{C1-8 alkyl}$, $n = 0-3$), and 15-40% other grafting layer from 50-95% I and(or) Me (meth)acrylate (II) and 5-50% ≥ 1 of (meth)acrylonitrile (III), Me methacrylate (IV), maleic anhydride (V), and N-C1-8-alkyl- or C6-20-aryl-substituted maleimide (VI), and (B2) 2-98% graft copolymer with average particle size 50-180 nm prepared from 40-80% grafting base polymer with glass temperature $<10^\circ$ and grafting layer from 50-95% I and(or) II and 5-50% ≥ 1 of III, IV, V, and VI, (C) 1-60% thermoplastic copolymer containing 50-80% styrene and 10-40% III, (D) 1-82.9% thermoplastic copolymer other than (C) containing 60-90% styrene and 10-40% III [with the amount of III

in (D) being less than in (C)], and (E) 1-40% thermoplastic copolymer containing α -methylstyrene (VII) 50-85, acrylonitrile (VIII) 15-50, and I ($R_1 = H$, $R_2 = C_1-8$ alkyl, $n = 0-3$) 0-15%. A typical composition contained 25% bisphenol A **polycarbonate**, 10% graft copolymer prepared from 150 parts Bu acrylate-tricyclodecenyl acrylate grafting base copolymer (IX), 20 parts grafting layer prepared from styrene, and 20 parts 2nd grafting layer prepared from 25:75 VIII-styrene mixture, 10% graft copolymer prepared from 150 parts IX and 40 parts grafting layer prepared from 25:75 VIII-styrene mixture, 25% 35:65 VIII-styrene copolymer (X), 5% 75:25 X, 25% 30:70 VIII-VII copolymer, and 1.5% carbon black.

- IC ICM C08L069-00
ICS C08L051-00; C08L025-12; C08L025-16; C08K003-04; D01F006-92;
D01F006-42
- ICA C08J005-00; C08J005-18
- ICI C08L051-00, C08L051-04, C08L051-06
- CC 37-6 (**Plastics** Manufacture and Processing)
- ST **polycarbonate** styrene graft polymer blend; maleimide deriv graft copolymer **polycarbonate** blend; methyl methacrylate graft copolymer **polycarbonate** blend; methylstyrene copolymer **polycarbonate** blend; methacrylonitrile graft copolymer **polycarbonate** blend; maleic anhydride graft copolymer **polycarbonate** blend; acrylonitrile copolymer **polycarbonate** blend; tricyclodecenyl acrylate graft copolymer **polycarbonate** blend; butyl acrylate graft copolymer **polycarbonate** blend; heat deformation resistant **polycarbonate** blend; impact resistant **polycarbonate** blend
- IT Heat-resistant materials
Impact-resistant materials
(compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic moldings with good heat-deformation and impact resistance)
- IT Polymer blends
RL: PRP (Properties)
(compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic moldings with good heat-deformation and impact resistance)
- IT Plastic films
(in claims; compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic films)
- IT Synthetic polymeric fibers, miscellaneous
RL: MSC (Miscellaneous)
(in claims; compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic moldings with good heat-deformation and impact resistance)
- IT Molded plastics, properties
RL: PRP (Properties)
(in claims; compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic moldings with good heat-deformation and impact resistance)
- IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
(compns. containing **polycarbonates** and graft and nongraft copolymers of styrene (derivs.) for thermoplastic moldings with good heat-deformation and impact resistance)
- IT 9003-54-7, Acrylonitrile-styrene copolymer 24936-68-3, Bisphenol A **polycarbonate**, properties 25037-45-0 25747-74-4, Acrylonitrile- α -methylstyrene copolymer

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (compns. containing **polycarbonates** and graft and nongraft
 copolymers of styrene (derivs.) for thermoplastic moldings with good
 heat-deformation and impact resistance)

IT **106912-44-1P**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
 (Properties); PREP (Preparation); USES (Uses)
 (compns. containing **polycarbonates** and graft and
 nongraft copolymers of styrene (derivs.) for thermoplastic moldings
 with good heat-deformation and impact resistance)

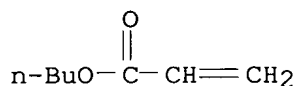
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

CMF C7 H12 O2



CM 2

CRN 107-13-1

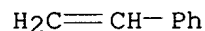
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

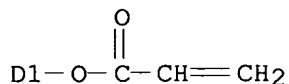
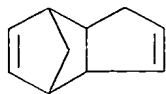
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:443208 HCAPLUS

DN 127:66669

TI Soft, thermoplastic compositions for coextruded moldings, especially tubes, films and coatings

IN Weber, Martin; Nikolai, Hartmut; Guentherberg, Norbert

PA BASF A.-G., Germany

SO Ger. Offen., 9 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|------------------|--------------|
| PI | DE 19542519 | A1 | 19970522 | DE 1995-19542519 | 19951115 <-- |
| PRAI | DE 1995-19542519 | | 19951115 | <-- | |

AB The title compns. with good bonding to hard thermoplastic resins, e.g., polyesters, polyamides, and especially **polycarbonates**, useful in automobiles, comprise mixts. of (A) acrylate copolymers grafted with specified vinyl aromatic monomers, (B) (meth)acrylate ester copolymers with vinyl aromatic monomers and (meth)acrylonitrile with glass temperature <0°, (C) copolymer(s) with glass temperature >10° obtained from vinyl aromatic monomer(s) and/or (meth)acrylonitrile, and (D) additives. For example, specimens coextruded from a com. **polycarbonate**/ASA copolymer blend (Terblend S-KR 2864) (hard component) and a soft component comprising 6.75/82/11.25 blend of (A) acrylonitrile-Bu acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer [poly(Bu acrylate) core] (preparation given) with (B) styrene-Bu acrylate-acrylonitrile terpolymer (Sunigum P7395) and (C) a styrene-acrylonitrile copolymer, had Shore A hardness 56, melt capacity 12%, and breakage of the soft component after repeated (10+) bending, vs. 91, 23 and peeling for a specimen coextruded from Terblend S-KR 2864 and 70/15/15 A + C + SEBS rubber blend.

IC ICM C08L051-06

ICS C08L033-06; C08L025-00; C08K003-26; C09D151-06; C09D133-06; C09D125-00; B29C047-30; B29C045-16

ICA C08L025-04; C08L025-12; C08J005-00; C08J005-18

ICI C08L033-06, C08L025-00, C08L033-20; B29K069-00, B29K077-00

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 38, 42

ST thermoplastic soft component coextrusion **polycarbonate**; ASA **polycarbonate** blend coextrusion soft thermoplastic; butyl acrylate graft copolymer coextrusion **polycarbonate**; styrene acrylonitrile copolymer blend coextrusion **polycarbonate**; polyacrylate core shell copolymer coextrusion **polycarbonate**

- IT Synthetic rubber, properties
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (acrylonitrile-Bu acrylate-styrene, Sunigum P 7395; soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT Polyamides, properties
Polycarbonates, properties
 Polyesters, properties
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and)
- IT Coating materials
 Pipes and Tubes
 Plastic films
 (soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT Polymer blends
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT 26299-47-8, Acrylonitrile-Butyl acrylate-Styrene copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (rubber; soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT **106912-44-1P**, Acrylonitrile-Butyl acrylate-Dihydrodicyclopentadienyl acrylate-Styrene graft copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (soft, thermoplastic **compns.** for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT 9003-56-9, Terluran 967K 158193-20-5, Luran S 797S 191428-32-7, Xenoy CL 300 191428-54-3, Terblend S-KR 2864
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT 9003-54-7, Acrylonitrile-Styrene copolymer
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (soft, thermoplastic compns. for films, coatings and moldings coextruded from soft thermoplastic components and **polycarbonates**, polyesters or polyamides)
- IT **106912-44-1P**, Acrylonitrile-Butyl acrylate-Dihydrodicyclopentadienyl acrylate-Styrene graft copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (soft, thermoplastic **compns.** for films, coatings and moldings

coextruded from soft thermoplastic components and
polycarbonates, polyesters or polyamides)

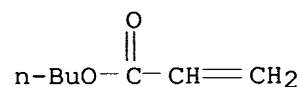
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

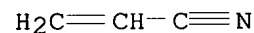
CMF C7 H12 O2



CM 2

CRN 107-13-1

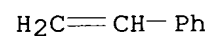
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

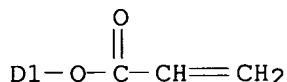
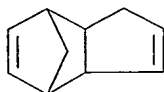
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:397222 HCAPLUS

DN 127:18412

TI Fire-resistant, halogen-free, moldable **polycarbonate**-based compositions

IN Weber, Martin; Weiss, Robert; Heckmann, Walter; Hingmann, Roland; Mc Kee, Graham Edmund

PA BASF A.-G., Germany

SO Ger. Offen., 13 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------|------|----------|------------------|--------------|
| PI | DE 19540312 | A1 | 19970430 | DE 1995-19540312 | 19951028 <-- |
| PRAI | DE 1995-19540312 | | 19951028 | <-- | |

AB Title comps., which do not drip in contact with flame, have good mech. properties, and are useful for manufacture of moldings, films, and fibers, contain 1-96.5% halogen-free **polycarbonate**; 1-96.5% halogen-free graft polymer based on 40-80% rubber with glass temperature <0° grafted with 20-60% mixture containing 50-95% Me methacrylate (I) and(or) styrene derivs. and 5-50% ≥1 of (meth)acrylonitrile (II), I, and maleic anhydride (III); 1-96.5% halogen-free thermoplastic copolymer based on 50-95% I and(or) styrene derivs. and 5-50% ≥1 of II, I, and III having weight-average mol. weight (Mw) <400,000; 0.5-30% halogen-free thermoplastic

copolymer based on I and(or) styrene derivs. 50-95, ≥1 of II, I, and III 5-50, and monoethylenically unsatd. monomer with ≥1 polar group 0-15% having Mw >800,000; 1-25% halogen-free phosphorus compound; and 0-50% additives. A typical composition contained 64.6% bisphenol A **polycarbonate**, 8.1% graft polymer prepared from 40 g 75:25 styrene-acrylonitrile (IV) mixture and 150 g 40% solids latex of 98:2 Bu acrylate-tricyclodeceny acrylate copolymer rubber, 12% 25:75 IV-styrene copolymer (V, Mw 157,000), 4% V (Mw 850,000), 11% Ph3PO4, and 0.3% high-mol.-weight fatty ester.

IC ICM C08L069-00

ICS C08L051-04; C08K005-523

ICA C08L025-12; C08L035-06; C08J005-00

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 40

ST dripproof fireproof halogen free **polycarbonate** blend; phenyl **phosphate** fireproofing agent **polycarbonate** blend; tricyclodeceny acrylate copolymer **polycarbonate** blend fireproof; butyl acrylate copolymer **polycarbonate** blend fireproof; acrylonitrile copolymer **polycarbonate** blend

fireproof; styrene copolymer **polycarbonate** blend fireproof;
 bisphenol A **polycarbonate** blend fireproof

IT **Polycarbonates**, properties
 Polymer blends
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (fire-resistant, halogen-free, moldable **polycarbonate**-based
 compns. for dripproof moldings and fibers)

IT Molded plastics, properties
 RL: PRP (Properties)
 (fire-resistant, halogen-free, moldable **polycarbonate**-based
 compns. for dripproof moldings and fibers)

IT Fireproofing agents
 (halogen-free phosphorus compds.; fire-resistant, halogen-free,
 moldable **polycarbonate**-based compns. for dripproof moldings
 and fibers)

IT Synthetic polymeric fibers, processes
 RL: PEP (Physical, engineering or chemical process); PROC (Process)
 (in claims; fire-resistant, halogen-free, moldable
polycarbonate-based compns. for dripproof moldings and fibers)

IT Plastic films
 RL: PRP (Properties)
 (in claims; fire-resistant, halogen-free, moldable
polycarbonate-based compns. for dripproof moldings and fibers)

IT 115-86-6, Triphenyl **phosphate**
 RL: MOA (Modifier or additive use); USES (Uses)
 (Disflamoll TP; fire-resistant, halogen-free, moldable
polycarbonate-based compns. for dripproof moldings and fibers)

IT 57583-54-7, Resorcinol bis(diphenyl **phosphate**)
 RL: MOA (Modifier or additive use); USES (Uses)
 (Fyrolflex RDP; fire-resistant, halogen-free, moldable
polycarbonate-based compns. for dripproof moldings and fibers)

IT 75805-16-2
 RL: MOA (Modifier or additive use); USES (Uses)
 (fire-resistant, halogen-free, moldable **polycarbonate**-based
 compns. for dripproof moldings and fibers)

IT 9003-54-7, Acrylonitrile-styrene copolymer 24936-68-3, Bisphenol
 A-carbonic acid copolymer, sru, properties 25037-45-0, Bisphenol
 A-carbonic acid copolymer 55063-78-0, Acrylonitrile-hydroxyethyl
 acrylate-styrene copolymer 106677-58-1, ABS graft copolymer
106912-44-1, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (fire-resistant, halogen-free, moldable **polycarbonate**-based
 compns. for dripproof moldings and fibers)

IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl
 acrylate graft copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (fire-resistant, halogen-free, moldable **polycarbonate**-based
 compns. for dripproof moldings and fibers)

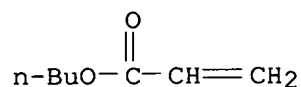
RN 106912-44-1 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene,
 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

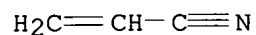
CMF C7 H12 O2



CM 2

CRN 107-13-1

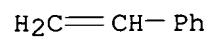
CMF C3 H3 N



CM 3

CRN 100-42-5

CMF C8 H8



CM 4

CRN 12542-30-2

CMF C13 H16 O2

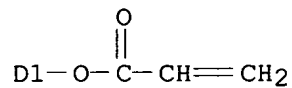
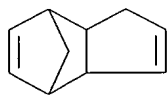
CCI IDS

CM 5

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:380902 HCAPLUS

DN 127:57920

TI Novel method of thermal epoxy curing based on photogeneration of polymeric amines and negative-tone image formation

AU Mejiritski, Alexander; Sarker, Ananda M.; Wheaton, Bryan; Neckers, Douglas C.

CS Center for Photochemical Sciences, Bowling Green State University, Bowling
Green, OH, 43403, USA

SO Chemistry of Materials (1997), 9(6), 1488-1494
CODEN: CMATEX; ISSN: 0897-4756

PB American Chemical Society

DT Journal

LA English

AB Polymeric amines generated by UV-induced electron transfer in polymeric
quaternized tetraalkylammonium borate salts are found suitable for the
thermal crosslinking of epoxides where nucleophilic attack on the epoxy
ring is favorable. A crosslinked polymer network insol. in organic solvent
becomes the basis of a neg.-tone photoimaging system. Sensitivity and
resolution parameters have been evaluated by atomic force microscopy.

Addition of
reagents containing hydroxyl moieties to a film containing both the polymeric
amine precursor and epoxide improves sensitivity more than 3-fold
manifesting chemical amplification due to the catalytic nature of the
crosslinking process.

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other
Reprographic Processes)
Section cross-reference(s): 37, 38

ST neg photoimaging thermal epoxy curing polyamine

IT Photoimaging materials
(by thermal epoxy curing based on photogeneration of polymeric amines)

IT Polyamines
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(photogeneration for thermal epoxy curing for imaging process)

IT Epoxides
Epoxy resins, reactions
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
(Reactant or reagent); USES (Uses)
(thermal curing based on photogeneration of polymeric amines for image
formation)

IT 191093-15-9P 191093-16-0P **191093-17-1P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(preparation and use as photocrosslinking agent for epoxy photoimaging
compns.)

IT **191093-17-1P**
RL: SPN (Synthetic preparation); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(preparation and use as photocrosslinking agent for epoxy photoimaging
compns.)

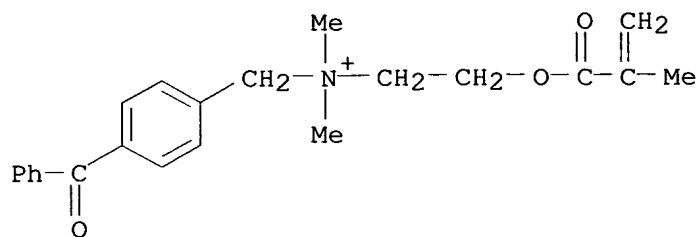
RN 191093-17-1 HCAPLUS

CN Benzenemethanaminium, 4-benzoyl-N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-
propenyl)oxy]ethyl]-, tetraphenylborate(1-) (1:1), homopolymer (9CI) (CA
INDEX NAME)

CM 1

CRN 178434-44-1

CMF C22 H26 N O3

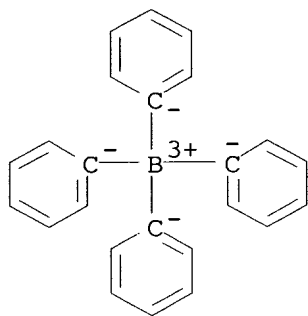


CM 2

CRN 4358-26-3

CMF C24 H20 B

CCI CCS



RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:9392 HCAPLUS

DN 126:32736

TI Actinic ray-curable resin compositions for optical composite elements

IN Matsuo, Daisuke; Inoe, Akira; Saito, Osamu

PA Olympus Optical Co, Japan; Dainippon Ink & Chemicals

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------|------|----------|-----------------|--------------|
| PI | JP 08269147 | A2 | 19961015 | JP 1995-71483 | 19950329 <-- |
| PRAI | JP 1995-71483 | | 19950329 | <-- | |

AB The comps. comprise (A) urethane-modified polyester (meth)acrylates prepared from polyester polyols having ring opening structures of lactones, polyisocyanates, and OH-containing (meth)acrylates, (B) comps. bearing ≥ 3 polymerizable unsatd. bonds, (C) comps. bearing ≥ 1 polymerizable unsatd. bond, (E) fluoro comps., and optionally (D) photopolymn. initiators. The optical elements, having good durability and long stability for use in cameras, microscopes, etc., are manufactured by curing and molding the comps. on substrates, e.g., glass lenses and plastic lenses. Thus, a polyester polyol (prepared by ring opening of

ε-caprolactone), isophorone diisocyanate, and hydroxyethyl acrylate were heated to give a polymer, which was mixed with tris(2-hydroxyethyl)isocyanurate triacrylate, dicyclopentenyl oxyethyl methacrylate, 1-hydroxycyclohexyl Ph ketone, and Megafac F 177, applied on glass lenses, UV-irradiated, and laminated with SiO₂ as an anti-reflection coating to give an optical element having refractive index 1.52, and high-temperature and moisture resistance.

IC ICM C08F290-06
ICS G02B001-04

CC 38-3 (**Plastics** Fabrication and Uses)
Section cross-reference(s): 73

ST actinic ray curable polyester methacrylate; urethane modified polyester acrylate optical element; heat resistance photocurable polyester methacrylate

IT Antireflective films
Lenses
Optical materials
(actinic ray-curable resin compns. for optical composite elements)

IT Laminated plastics, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(actinic ray-curable resin compns. for optical composite elements)

IT Surfactants
(fluoro compds.; actinic ray-curable resin compns. for optical composite elements)

IT Polyurethanes, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyester-, methacrylates; actinic ray-curable resin compns. for optical composite elements)

IT **184782-73-8P 184782-74-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(actinic ray-curable resin **compns.** for optical composite elements)

IT 1306-38-3, Cerium dioxide, uses 1314-23-4, Zirconium dioxide, uses 1314-61-0, Tantalum **oxide** (Ta₂O₅) 7631-86-9, Silica, uses 7783-40-6, Magnesium fluoride
RL: TEM (Technical or engineered material use); USES (Uses)
(anti-reflection coatings; actinic ray-curable resin compns. for optical composite elements)

IT 52550-45-5, Megafac F 144D 85568-56-5, Megafac F 177
RL: MOA (Modifier or additive use); USES (Uses)
(surfactants; actinic ray-curable resin compns. for optical composite elements)

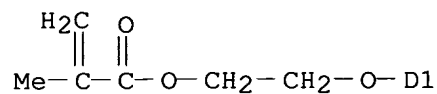
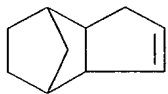
IT **184782-73-8P 184782-74-9P**
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(actinic ray-curable resin **compns.** for optical composite elements)

RN 184782-73-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

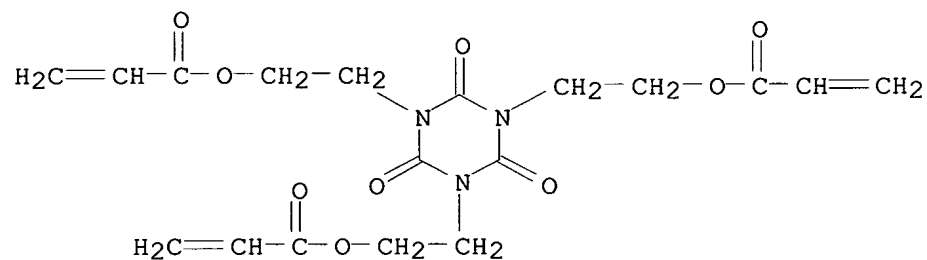
CM 1

CRN 68169-03-9
CMF C16 H22 O3
CCI IDS



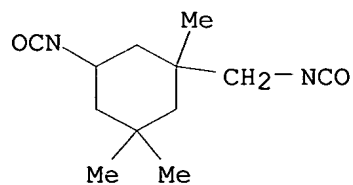
CM 2

CRN 40220-08-4
CMF C18 H21 N3 O9



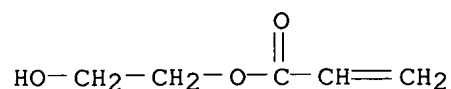
CM 3

CRN 4098-71-9
CMF C12 H18 N2 O2



CM 4

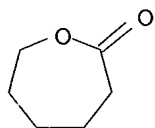
CRN 818-61-1
CMF C5 H8 O3



CM 5

CRN 502-44-3

CMF C6 H10 O2



RN 184782-74-9 HCAPLUS

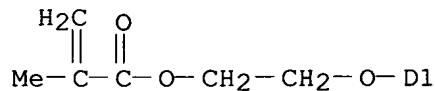
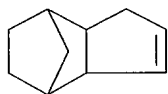
CN 2-Propenoic acid, 2-methyl-, 2-[[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl ester, polymer with 2-hydroxyethyl 2-propenoate, 2-(hydroxymethyl)-2-[[[1-oxo-2-propenyl]oxy]methyl]-1,3-propanediyl di-2-propenoate, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, 2-oxepanone and (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triyl)tri-2,1-ethanediyl tri-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 68169-03-9

CMF C16 H22 O3

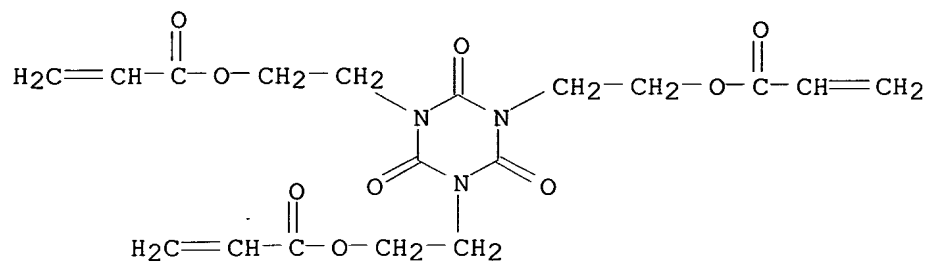
CCI IDS



CM 2

CRN 40220-08-4

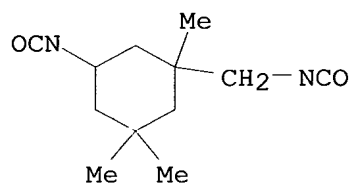
CMF C18 H21 N3 O9



CM 3

CRN 4098-71-9

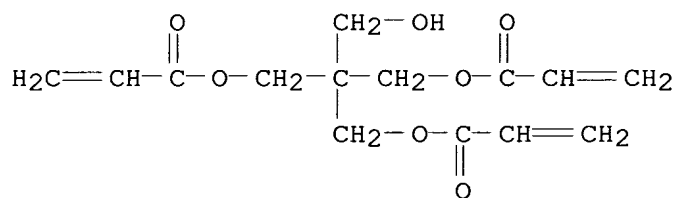
CMF C12 H18 N2 O2



CM 4

CRN 3524-68-3

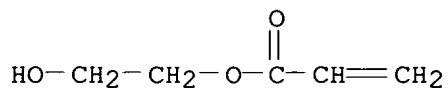
CMF C14 H18 O7



CM 5

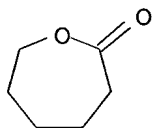
CRN 818-61-1

CMF C5 H8 O3



CM 6

CRN 502-44-3
CMF C6 H10 O2



L37 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1996:759006 HCAPLUS

DN 126:32226

TI Compositions based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid and their use in the field of construction

IN Vanhoye, Didier; Barbier, Yves; Cerf, Martine; Wnuk, Mieczyslaw

PA Elf Atochem S.A., Fr.

SO Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

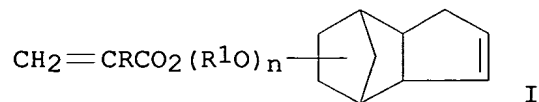
DT **Patent**

LA French

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | EP 742264 | A2 | 19961113 | EP 1996-400719 | 19960403 <-- |
| | EP 742264 | A3 | 19961127 | | |
| | EP 742264 | B1 | 19971029 | | |
| | R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| | FR 2732961 | A1 | 19961018 | FR 1995-4466 | 19950413 |
| | FR 2732961 | B1 | 19970516 | | |
| | AT 159738 | E | 19971115 | AT 1996-400719 | 19960403 <-- |
| | ES 2109829 | T3 | 19980116 | ES 1996-400719 | 19960403 <-- |
| | CZ 288310 | B6 | 20010516 | CZ 1996-1046 | 19960410 <-- |
| | CA 2173924 | AA | 19961014 | CA 1996-2173924 | 19960411 <-- |
| | CA 2173924 | C | 20010724 | | |
| | CN 1145916 | A | 19970326 | CN 1996-108089 | 19960413 <-- |
| | CN 1075523 | B | 20011128 | | |
| | JP 09137080 | A2 | 19970527 | JP 1996-117050 | 19960415 <-- |
| | JP 2831613 | B2 | 19981202 | | |
| | US 6242549 | B1 | 20010605 | US 1996-632081 | 19960415 <-- |
| PRAI | FR 1995-4466 | A | 19950413 | <-- | |

GI



AB Compns., useful as binders for mortars, polymer concrete, adhesion-improving primers, and top coatings, contain (A) a monomer system comprising title esters I (R = H or Me, R¹ = C2-6 alkylene, n = 1 or 2) 50-90, ≥1 (meth)acrylate ester forming a polymer with lower glass temperature than the I homopolymer 0-25, and (poly)allyl glycidyl ether 5-30 parts and (B) an initiator system comprising (a) 0.1-3 parts ≥1

C3-8 hydrocarbon peroxide and 0.1-2 parts ≥ 1 aromatic amine (b) 0.1-3 parts ≥ 1 C3-18 hydrocarbon hydroperoxide and 0.0005-2 parts polyvalent metal salt, (c) (a) and 0.0005-2 parts polyvalent metal salt, or (d) (a) and (b), based on 100 parts (A).

IC ICM C08L033-06

ICS C08K005-00; C04B026-06; C08F220-30; C08F216-12

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 42, 58

ST dicyclopentadienyloxyalkyl methacrylate polymer binder; hydroperoxide initiator dicyclopentadienyloxyalkyl methacrylate polymer manuf; salt initiator dicyclopentadienyloxyalkyl methacrylate polymer; amine initiator dicyclopentadienyloxyalkyl methacrylate polymer; peroxide initiator dicyclopentadienyloxyalkyl methacrylate polymer manuf; coating dicyclopentadienyloxyalkyl methacrylate polymer; adhesion improving primer dicyclopentadienyloxyalkyl methacrylate polymer; concrete dicyclopentadienyloxyalkyl methacrylate polymer; mortar dicyclopentadienyloxyalkyl methacrylate polymer

IT Primers (paints)

(adhesion-improving; compns. based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT Amines, uses

RL: CAT (Catalyst use); USES (Uses)

(aromatic, polymerization catalysts; compns. based on

dicyclopentadienyloxyalkyl

esters of (meth)acrylic acid for construction)

IT Naphthenic acids, uses

RL: CAT (Catalyst use); USES (Uses)

(cobalt salts, polymerization catalyst; compns. based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT Coating materials

Mortar

Polymer concrete

Polymerization catalysts

(compns. based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT Hydroperoxides

Peroxides, uses

RL: CAT (Catalyst use); USES (Uses)

(organic, polymerization catalysts; compns. based on

dicyclopentadienyloxyalkyl

esters of (meth)acrylic acid for construction)

IT Salts, uses

RL: CAT (Catalyst use); USES (Uses)

(polyvalent, polymerization catalysts; compns. based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT **184488-94-6P 184488-95-7P 184488-96-8P**

184488-97-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymer concrete and concrete coatings; **compns.** based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT 75-91-2 80-15-9, Cumene hydroperoxide 94-36-0, Benzoyl peroxide, uses

99-97-8, N,N-Dimethyl-p-toluidine 100-10-7, p-N,N-

Dimethylaminobenzaldehyde 121-69-7, N,N-Dimethylaniline, uses

614-45-9, tert-Butyl perbenzoate 1338-23-4, Methyl ethyl ketone peroxide

2167-23-9, 2,2-Bis(tert)butylperoxy)butane 2372-21-6, tert-Butylperoxy

isopropyl **carbonate** 3025-88-5, 2,5-Dimethyl-2,5-dihydroperoxyhexane 7440-48-4D, Cobalt, naphthenic acid salts, uses
 RL: CAT (Catalyst use); USES (Uses)

(polymerization catalyst; compns. based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

IT **184488-94-6P 184488-95-7P 184488-96-8P 184488-97-9P**

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymer concrete and concrete coatings; **compns.** based on dicyclopentadienyloxyalkyl esters of (meth)acrylic acid for construction)

RN 184488-94-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl)oxy]ethyl ester, polymer with α,α' -1,2-ethanediylbis[ω -hydroxypoly[oxy[(2-propenyloxy)methyl]-1,2-ethanediyl]] (9CI) (CA INDEX NAME)

CM 1

CRN 98001-50-4

CMF (C6 H10 O2)n (C6 H10 O2)n C2 H6 O2

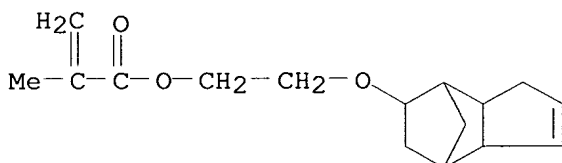
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 66008-64-8

CMF C16 H22 O3



RN 184488-95-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl ester, polymer with α,α' -1,2-ethanediylbis[ω -hydroxypoly[oxy[(2-propenyloxy)methyl]-1,2-ethanediyl]] and 2-[(3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl)oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98001-50-4

CMF (C6 H10 O2)n (C6 H10 O2)n C2 H6 O2

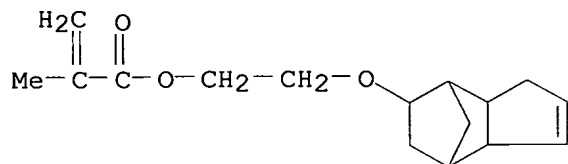
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 66008-64-8

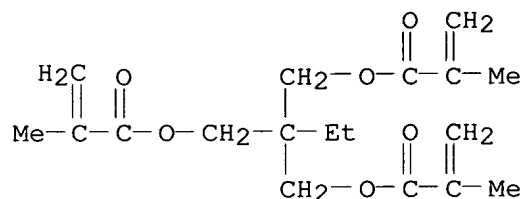
CMF C16 H22 O3



CM 3

CRN 3290-92-4

CMF C18 H26 O6



RN 184488-96-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl)oxy]ethyl ester, polymer with α,α' -1,2-ethanediylbis[ω -hydroxypoly[oxy[(2-propenyloxy)methyl]-1,2-ethanediyl]] and exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98001-50-4

CMF (C6 H10 O2)_n (C6 H10 O2)_n C2 H6 O2

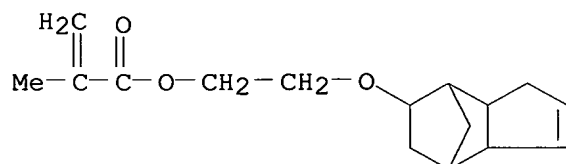
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 66008-64-8

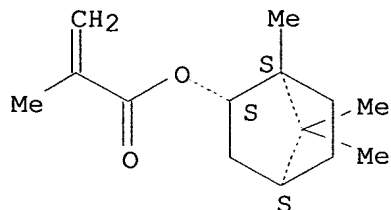
CMF C16 H22 O3



CM 3

CRN 7534-94-3
CMF C14 H22 O2

Relative stereochemistry.



RN 184488-97-9 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-[(3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-6-yl)oxy]ethyl ester, polymer with α, α' -1,2-ethanediylbis[ω -hydroxypoly[oxy[(2-propenyloxy)methyl]-1,2-ethanediyl]] and nonyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

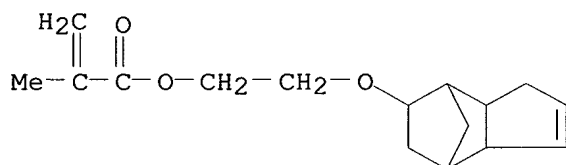
CM 1

CRN 98001-50-4
CMF (C6 H10 O2)_n (C6 H10 O2)_n C2 H6 O2
CCI IDS, PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

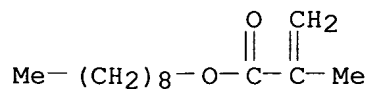
CM 2

CRN 66008-64-8
CMF C16 H22 O3



CM 3

CRN 2696-43-7
CMF C13 H24 O2



L37 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:982333 HCAPLUS
DN 124:10120

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

TI Molding compositions for impact- and weather-resistant articles
 IN McKee, Graham Edmund; Niessner, Norbert; Fisch, Herbert
 PA BASF A.-G., Germany
 SO Eur. Pat. Appl., 18 pp.
 CODEN: EPXXDW

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | EP 670351 | A1 | 19950906 | EP 1995-102969 | 19950302 <-- |
| | EP 670351 | B1 | 20010725 | | |
| | R: BE, DE, FR, GB, NL | | | | |
| | DE 4407069 | A1 | 19950907 | DE 1994-4407069 | 19940303 |
| | JP 08041352 | A2 | 19960213 | JP 1995-44562 | 19950303 <-- |
| | US 5977254 | A | 19991102 | US 1997-833462 | 19970407 <-- |
| PRAI | DE 1994-4407069 | A | 19940303 | <-- | |
| | US 1995-396706 | B1 | 19950301 | <-- | |
| AB | The composition contains (A) a microemulsion polymer with glass-transition temperature <0° and average particle size <50 nm 1-99, (B) a partially crystalline polymer 1-99, (C) a graft copolymer with particle size 60 nm-10 µm, thermoplastic polyurethane, thermoplastic elastomer, acrylic rubber, diene rubber, EPR, EPDM, and/or silicone rubber 0-50, (D) a polycarbonate 0-50, and (E) fibrous and/or particulate filler 0-50 weight% (based on A-E). Thus, a copolymer microemulsion with average particle size 40 nm was prepared from Bu acrylate 2892.4, tert-Bu acrylate 192.0, methacrylic acid 19.2, and dihydrodicyclopentadienyl acrylate 96 g in water containing an alkanesulfonate surfactant. An extruder was charged with 15% of the microemulsion and 85% Ultramid B 35 and the mixture was extruded at 280° to give a sample with notched impact strength (DIN 53453, 23°) 89 kJ/m2. | | | | |
| IC | ICM C08L051-04 | | | | |
| | ICS C08L077-00; C08L023-00; C08L067-00; C08L071-00; C08L081-04 | | | | |
| CC | 37-3 (Plastics Manufacture and Processing) | | | | |
| ST | impact resistance polymer blend molding; polyacrylate microemulsion polyamide blend | | | | |
| IT | Polyoxymethylenes, properties | | | | |
| | RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (blends with polyacrylates and polyurethanes; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Polycarbonates , uses | | | | |
| | Rubber, ethylene-propene | | | | |
| | Rubber, silicone, uses | | | | |
| | RL: MOA (Modifier or additive use); USES (Uses) (blends; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Ionomers | | | | |
| | RL: POF (Polymer in formulation); USES (Uses) (blends; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Polyesters, uses | | | | |
| | RL: POF (Polymer in formulation); USES (Uses) (blends; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Polyoxyalkylenes, uses | | | | |
| | RL: POF (Polymer in formulation); USES (Uses) (blends; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Polythioarylenes | | | | |
| | RL: POF (Polymer in formulation); USES (Uses) (blends; molding compns. for impact- and weather-resistant articles) | | | | |
| IT | Polyamides, properties | | | | |

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polyacrylate microemulsion blends; molding compns. for impact- and weather-resistant articles)

IT Impact-resistant materials
 (polymer blend molding compns. for impact- and weather-resistant articles)

IT Plastics, molded
 RL: POF (Polymer in formulation); USES (Uses)
 (polymer blend molding compns. for impact- and weather-resistant articles)

IT Rubber, synthetic
 RL: MOA (Modifier or additive use); USES (Uses)
 (EPDM, blends; molding compns. for impact- and weather-resistant articles)

IT Rubber, synthetic
 RL: MOA (Modifier or additive use); USES (Uses)
 (acrylic, blends; molding compns. for impact- and weather-resistant articles)

IT Rubber, synthetic
 RL: MOA (Modifier or additive use); USES (Uses)
 (diene, blends; molding compns. for impact- and weather-resistant articles)

IT Emulsions
 (micro-, in preparation of polymer blend molding compns. for impact- and weather-resistant articles)

IT Urethane polymers, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polyester-, block, blends with polyacetals and polyacrylates; molding compns. for impact- and weather-resistant articles)

IT Polyketones
 RL: POF (Polymer in formulation); USES (Uses)
 (polyether-, blends; molding compns. for impact- and weather-resistant articles)

IT Polyethers, uses
 RL: POF (Polymer in formulation); USES (Uses)
 (polyketone-, blends; molding compns. for impact- and weather-resistant articles)

IT Alkenes, uses
 RL: POF (Polymer in formulation); USES (Uses)
 (polymers, blends; molding compns. for impact- and weather-resistant articles)

IT 116426-08-5, Adipic acid-1,4-butanediol-1,6-hexanediol-MDI block copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends with polyacetals and polyacrylates; molding compns. for impact- and weather-resistant articles)

IT 25214-85-1, Butanediol formal-trioxane copolymer
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends with polyacrylates and polyurethanes; molding compns. for impact- and weather-resistant articles)

IT **119701-33-6**
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (microemulsion, blends with polyacetals and polyurethanes; molding compns. for impact- and weather-resistant articles)

IT 171570-17-5
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (microemulsion, polyamide blends; molding compns. for impact- and weather-resistant articles)

IT 25038-54-4, Ultramid B 35, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)

(polyacrylate microemulsion blends; molding compns. for impact- and weather-resistant articles)

IT 9010-79-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (rubber, blends; molding compns. for impact- and weather-resistant articles)

IT 119701-33-6
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (microemulsion, blends with polyacetals and polyurethanes; molding compns. for impact- and weather-resistant articles)

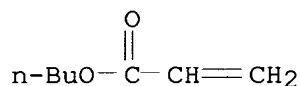
RN 119701-33-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2

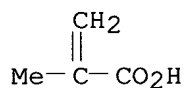
CMF C7 H12 O2



CM 2

CRN 79-41-4

CMF C4 H6 O2



CM 3

CRN 12542-30-2

CMF C13 H16 O2

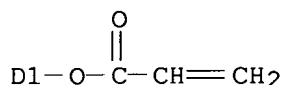
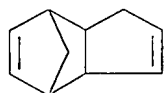
CCI IDS

CM 4

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



L37 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:974037 HCAPLUS

DN 124:89019

TI Polymer compositions, their use for optical materials and cured products from

IN Ishii, Kazuhiko; Tokuda, Kyohisa; Yokoshima, Minoru

PA Nippon Kayaku Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | JP 07247331 | A2 | 19950926 | JP 1994-66509 | 19940311 <-- |
| PRAI | JP 1994-66509 | | 19940311 | <-- | |
| AB | Title compns. contain (A) epoxy (meth)acrylates obtained by treating bisphenol A-based epoxy resins [hydrolyzable Cl content (HC) ≤700 ppm] with (meth)acrylic acids and (B) ethylenically unsatd. group-containing compds. [not (A)]. The compns. give products having good heat and moisture resistance. Thus, a composition containing epoxy acrylate [prepared from 360 parts RE-310S (bisphenol A-based epoxy resin) and 134 parts acrylic acid; HC = 365 ppm] 30, trimethylolpropane triacrylate 30, 1,6-hexanediol diacrylate 25, tetrahydrofurfuryl acrylate 10, and Irgacure 184 5 parts was coated on an optical disk (Al-deposited polycarbonate substrate) and cured to give good heat and moisture resistance. | | | | |
| IC | ICM C08F290-06 | | | | |
| | ICS G02B001-10 | | | | |
| ICA | C08G059-17; G11B007-24 | | | | |
| CC | 37-6 (Plastics Manufacture and Processing) | | | | |
| | Section cross-reference(s): 42 | | | | |
| ST | heat resistance epoxy acrylate blend; moisture resistance epoxy acrylate blend; optical material epoxy acrylate coating | | | | |
| IT | Epoxy resins, properties | | | | |
| | RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses) | | | | |
| | ((meth)acrylates; polymer compns. with good heat and moisture resistance for optical materials) | | | | |
| IT | Optical materials | | | | |
| | (polymer compns. with good heat and moisture resistance for optical materials) | | | | |
| IT | Coating materials | | | | |
| | (heat- and moisture-resistant, polymer compns. with good heat and moisture resistance for optical materials) | | | | |
| IT | 172417-20-8P, 1,6-Hexanediol diacrylate-RE-310S acrylate- | | | | |

tetrahydrofurfuryl acrylate-trimethylolpropane triacrylate copolymer
172723-37-4P, Dicyclopentenyl acrylate-neopentyl glycol
 diacrylate-RE-310S acrylate copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (polymer **compns.** with good heat and moisture resistance for
 optical materials)

IT **172723-37-4P**, Dicyclopentenyl acrylate-neopentyl glycol
 diacrylate-RE-310S acrylate copolymer
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
 engineered material use); PREP (Preparation); USES (Uses)
 (polymer **compns.** with good heat and moisture resistance for
 optical materials)

RN 172723-37-4 HCAPLUS

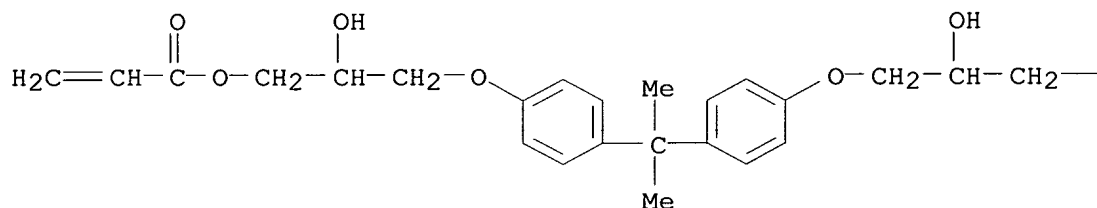
CN 2-Propenoic acid, 2,2-dimethyl-1,3-propanediyl ester, polymer with
 (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]
 di-2-propenoate and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate (9CI) (CA INDEX NAME)

CM 1

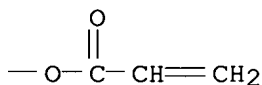
CRN 4687-94-9

CMF C27 H32 O8

PAGE 1-A



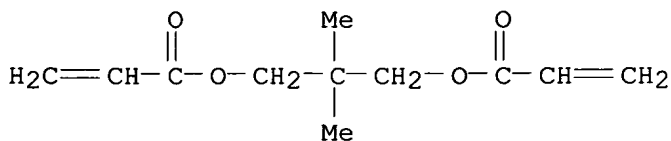
PAGE 1-B



CM 2

CRN 2223-82-7

CMF C11 H16 O4

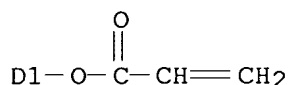
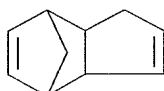


CM 3

CRN 12542-30-2
 CMF C13 H16 O2
 CCI IDS

CM 4

CRN 50976-02-8
 CMF C13 H14 O2
 CCI IDS



L37 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:742833 HCAPLUS

DN 123:115654

TI Abrasion-resistant acrylic polymer-based coating compositions with good acid resistance

IN Azuma, Ichiro; Iwamura, Goro

PA Dainippon Ink & Chemicals, Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT **Patent**

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | JP 07133436 | A2 | 19950523 | JP 1993-278251 | 19931108 <-- |
| | JP 3369274 | B2 | 20030120 | | |
| PRAI | JP 1993-278251 | | 19931108 | <-- | |

AB The compns. comprise functional group-containing acrylic polymers, functional group-containing compds. (number average mol.-weight ≤1500), catalysts, reactive

diluents and polymeric microparticles. A mixture of Bu acrylate-glycidyl methacrylate-trimethylsiloxy ethylmethacrylate-maleic anhydride-styrene copolymer, Bu acrylate-glycidyl methacrylate-γ-methacryloxyoxypropylmethoxysilane-styrene copolymer, monoisopropyl **phosphate**, 1-methylimidazole, tetrahydrophthalic anhydride and dicyclopentanyl acrylate-divinylbenzene-lauryl methacrylate-MMA-styrene-tetraethylene glycol diacrylate copolymer particle showed good hardness and weather resistance.

IC ICM C08L101-02

ICS B05D001-36; B05D007-14; B05D007-24; C08L101-00; C08L101-10;
 C09D004-02; C09D133-00

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37

ST acrylic copolymer coating weather resistance; silane acrylate copolymer

coating antiacid; abrasive resistance acrylic polymer coating

IT Chemically resistant materials
(abrasion-resistant acrylic polymer-based coating compns. with good acid resistance)

IT Acrylic polymers, uses
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(abrasion-resistant acrylic polymer-based coating compns. with good acid resistance)

IT Coating materials
(abrasion- and weather-resistant, abrasion-resistant acrylic polymer-based coating compns. with good acid resistance)

IT 166524-07-8 166524-08-9 166524-09-0 166524-10-3 166524-11-4
166524-12-5 166598-04-5
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(abrasion-resistant acrylic polymer-based coating compns. with good acid resistance)

IT **166524-13-6**
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(particles; abrasion-resistant acrylic polymer-based coating **compns.** with good acid resistance)

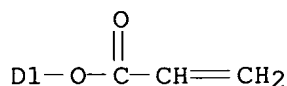
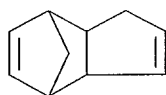
IT **166524-13-6**
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(particles; abrasion-resistant acrylic polymer-based coating **compns.** with good acid resistance)

RN 166524-13-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, dodecyl ester, polymer with diethenylbenzene, ethenylbenzene, methyl 2-methyl-2-propenoate, oxybis(2,1-ethanediyl) di-2-propenoate and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indenyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

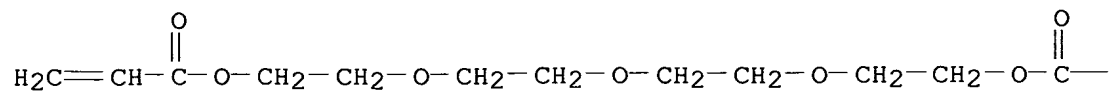
CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



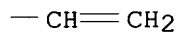
CM 2

CRN 17831-71-9
CMF C14 H22 O7

PAGE 1-A



PAGE 1-B

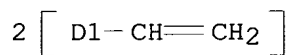


CM 3

CRN 1321-74-0

CMF C10 H10

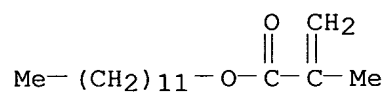
CCI IDS



CM 4

CRN 142-90-5

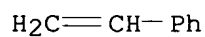
CMF C16 H30 O2



CM 5

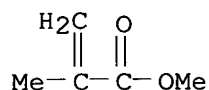
CRN 100-42-5

CMF C8 H8



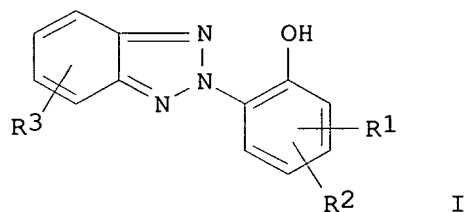
CM 6

CRN 80-62-6
CMF C5 H8 O2



L37 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:650463 HCAPLUS
DN 123:230225
TI Light- and chemically resistant polymer compositions containing
UV-absorbing polymers
IN Akata, Atsuo; Daimon, Emiko; Hama, Juji; Kameshima, Takashi; Kono,
Kazuhiro
PA Otsuka Kagaku Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | JP 07090184 | A2 | 19950404 | JP 1994-175379 | 19940727 <-- |
| PRAI | JP 1994-175379 | A | 19940727 | <-- | |
| | JP 1993-184682 | | 19930727 | <-- | |
| GI | | | | | |



AB Title comps. contain synthetic polymers and UV-absorbing polymers having mol. weight 1000-45,000, e.g. polymers of (meth)acryloxy group-containing benzotriazoles I [≥ 1 of R1-R3 = R4mO2CCR5:CH2; the other(s) = C1-8 alkyl, C1-8 alkoxy, cyano, OH, halo, CO2H, alkoxycarbonyl; R4 = C1-10 linear or branched alkylene; R5 = H, C1-4 linear or branched alkyl; m = 0, 1]. I have good compatibility with wide varieties of polymers and do not sublime or decompose in molding. Thus, 100 parts polypropylene was mixed 0.9 part 2-[2'-hydroxy-5'-(methacryloyloxyethyl)phenyl]benzotriazole-Me methacrylate copolymer (mol. weight 4.2 + 104), injection molded, and exposed to a Sunshine weather-o-meter for 2000 h to show no discoloration.

IC ICM C08L101-00
ICS C08K005-3475
ICA C08F020-36
CC 37-6 (**Plastics** Manufacture and Processing)
ST benzotriazole polymer UV absorber; light chem resistance polymer
IT Chemically resistant materials
Light stabilizers

(light- and chemical resistant polymer compns. containing UV-absorbing polymers)

IT Acrylic polymers, properties
Polyamides, properties
Polycarbonates, properties
Polyesters, properties
Urethane polymers, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(light- and chemical resistant polymer compns. containing UV-absorbing polymers)

IT Plastics
RL: PRP (Properties)
(light- and chemical resistant polymer compns. containing UV-absorbing polymers)

IT Alkenes, properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(polymers, light- and chemical resistant polymer compns. containing UV-absorbing polymers)

IT **25189-68-8P 72100-13-1P**, 2-Hydroxy-4-(2-methacryloyloxy)ethoxybenzophenone-styrene copolymer 168765-21-7P 168765-22-8P 168765-23-9P 168765-25-1P 168765-27-3P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(light- and chemical resistant polymer **compns.** containing UV-absorbing polymers)

IT 9002-85-1, Poly(vinylidene chloride) 9002-86-2, PVC 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-butadiene-styrene copolymer 9011-14-7, Poly(methyl methacrylate) 25038-59-9, PET (polyester), properties
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
(light- and chemical resistant polymer compns. containing UV-absorbing polymers)

IT **25189-68-8P 72100-13-1P**, 2-Hydroxy-4-(2-methacryloyloxy)ethoxybenzophenone-styrene copolymer
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); PREP (Preparation); USES (Uses)
(light- and chemical resistant polymer **compns.** containing UV-absorbing polymers)

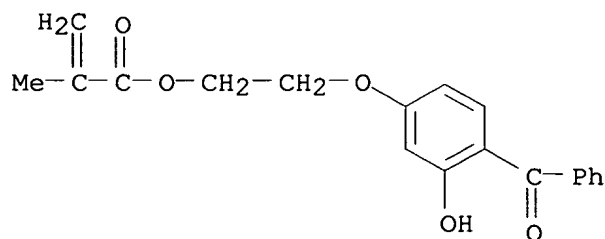
RN 25189-68-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

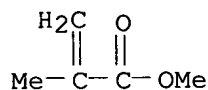
CRN 16613-04-0

CMF C19 H18 O5



CM 2

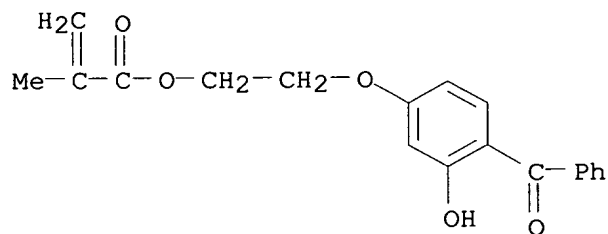
CRN 80-62-6
CMF C5 H8 O2



RN 72100-13-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

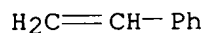
CM 1

CRN 16613-04-0
CMF C19 H18 O5



CM 2

CRN 100-42-5
CMF C8 H8

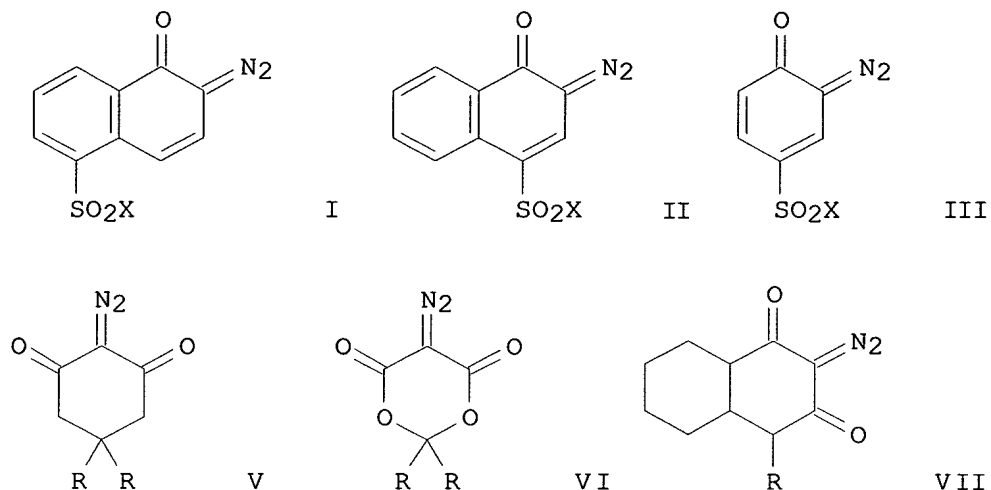


L37 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:529081 HCAPLUS
DN 124:31150
TI Photopolymerizable compositions
IN Kimura, Yoshio; Watanabe, Masahiro; Hagiwara, Toshio
PA Tokuyama Sekyu Kagaku Kk, Japan; Showa Denko Kk
SO Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF

DT **Patent**
LA Japanese
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | JP 07053614 | A2 | 19950228 | JP 1993-222306 | 19930816 <-- |
| PRAI | JP 1993-222306 | | 19930816 | <-- | |

OS MARPAT 124:31150
GI



AB The compns., useful for adhesives, coatings, ink, etc., comprise (A) M-.D+ [D+ = cationic dye; M- = (in)organic anion] having absorption at visible or near IR region, (B) R1B-R2R3R4Z+ (R1-4 = alkyl, aryl, aralkyl, alkaryl, alkenyl, alkynyl, alicyclic, heterocyclic, allyl; R1-4 may form ring; Z+ = alkali metal ion, alkaline earth metal ion, R5N+R6R7R8; R5-R8 = alkyl, aryl, aralkyl, alkaryl, alkenyl, alkynyl, alicyclic, heterocyclic; R5-R8 may form ring), (C) photoacid generators of o-quinonediazide-containing compds. I, II, III, 1,2-benzoquinone-2-diazide (IV), V, VI, and VII [X = halo anion, oxyacid anion, NR2-, MO-, RO-; M = alkali metal, alkaline earth metal; R = H, alkyl, aryl, aralkyl, heterocyclic, aryl or aralkyl having ≥ 1 o-quinonediazide, compound containing o-quinonediazide residue I-VII], and (D) monomers and/or oligomers having ≥ 1 polymerizable groups containing ethylenic double bonds. Thus, a composition comprising U 4HA (urethane oligomer) 60, trimethylolpropane triacrylate 40, Rhodamine B 0.1, tetrabutylammonium butyltriphenylborate 2.0, and 1,2-naphthoquinone-2-diazido-4-sulfonyl chloride 0.1 part was irradiated with UV for 5 s to give a completely cured product.

IC ICM C08F002-50

CC 37-6 (**Plastics** Manufacture and Processing)

ST naphthoquinonediazidosulfonyl chloride acrylic photopolymn; quaternary ammonium borate acrylic photopolymn

IT Polymerization

(photochem., of acrylic monomers or oligomers; photopolymerizable compns.)

IT 1460-08-8, 2-Diazocyclohexane-1,3-dione 4024-72-0, 1,2-Benzoquinone-2-diazide 7270-63-5 36451-09-9 68427-51-0D, derivs. 167858-14-2 167858-15-3

RL: MOA (Modifier or additive use); USES (Uses)

(photoacid generator; photopolymerizable compns.)

IT **73727-68-1P** 167858-10-8P 167858-11-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(photopolymerizable compns.)

IT 61-73-4, Methylene blue 81-88-9, Rhodamine B 548-62-9, Crystal violet
 2440-22-4, Seesorb 701 7631-86-9, Aerosil 200, uses **13463-67-7**
 , Titanium **oxide**, uses 80912-02-3 120307-06-4,
 Tetrabutylammonium butyltriphenylborate 167858-13-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (photopolymerizable compns.)

IT **73727-68-1P**
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)
 (photopolymerizable **compns.**)

RN 73727-68-1 HCAPLUS

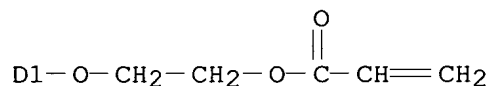
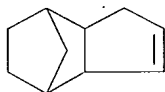
CN 2-Propenoic acid, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or
 6)-yl]oxy]ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 68169-12-0

CMF C15 H20 O3

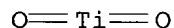
CCI IDS



IT **13463-67-7**, Titanium **oxide**, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (photopolymerizable compns.)

RN 13463-67-7 HCAPLUS

CN Titanium oxide (TiO₂) (8CI, 9CI) (CA INDEX NAME)



L37 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:487857 HCAPLUS

DN 122:214852

TI Particulate graft polymers for use in thermoplastic molding compositions

IN Niessner, Norbert; Seitz, Friedrich; Fischer, Wolfgang; Tiefensee, Kristin

PA BASF A.-G., Germany

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT **Patent**

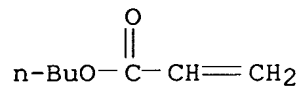
LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-------------------------------|------|----------|-----------------|--------------|
| PI | EP 621292 | A2 | 19941026 | EP 1994-106026 | 19940419 <-- |
| | EP 621292 | A3 | 19941130 | | |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |

DE 4313087 A1 19941027 DE 1993-4313087 19930422
 JP 06313018 A2 19941108 JP 1994-84947 19940422 <--
 PRAI DE 1993-4313087 A 19930422 <--
 AB The title polymers, useful in impact-resistant moldings, are prepared by grafting of monomers on rubber-elastic polymers in the presence of alkali metal **persulfates**, Fe(II) salts, and alkali metal (hydroxymethane)sulfonates as redox catalysts. Grafting of 810 g styrene and 270 g acrylonitrile on 1620 g (solids) 40% latex of 98:2 Bu acrylate-dihydrodicyclopentadienyl acrylate copolymer in the presence of 0.07 g FeSO₄·7H₂O, 2.3 g HOCH₂SO₂Na, and 12 mmol K₂S₂O₈ at 65° gave a graft copolymer (I). A 1:1 blend of I with 65:35 SAN had notched impact strength 27 kJ/m²; vs. 15 when I was prepared with tert-BuOOH in place of K₂S₂O₈.
 IC ICM C08F291-02
 CC 35-4 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37, 67
 ST impact resistance polymer blend; graft polymer blend; catalyst polymn graft; **peroxydisulfate** catalyst polymn graft; formaldehyde sulfoxylate catalyst polymn; ferrous **sulfate** catalyst polymn
 IT Plastics, molded
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (impact-resistant; particulate graft polymers for use in thermoplastic molding compns.)
 IT Impact-resistant materials
 (particulate graft polymers for use in thermoplastic molding compns.)
 IT Polymerization catalysts
 (graft, redox, ferrous salts, formaldehyde sulfoxylates and **persulfates**; for particulate graft polymers for use in thermoplastic molding compns.)
 IT **106912-44-1P**, Acrylonitrilebutyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (blends; particulate graft polymers for use in thermoplastic molding compns.)
 IT 9003-54-7
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends; particulate graft polymers for use in thermoplastic molding compns.)
 IT 149-44-0, Sodium hydroxymethanesulfinate 7720-78-7, Ferrous **sulfate** 7727-21-1, Dipotassium **peroxydisulfate**
 RL: CAT (Catalyst use); USES (Uses)
 (polymerization catalyst; particulate graft polymers for use in thermoplastic molding compns.)
 IT **106912-44-1P**, Acrylonitrilebutyl acrylate-dihydrodicyclopentadienyl acrylate-styrene graft copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); PREP (Preparation); USES (Uses)
 (blends; particulate graft polymers for use in thermoplastic molding compns.)
 RN 106912-44-1 HCAPLUS
 CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)
 CM 1
 CRN 141-32-2

CMF C7 H12 O2



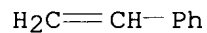
CM 2

CRN 107-13-1
CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8

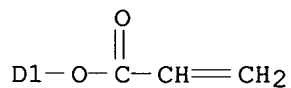
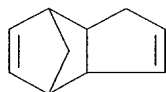


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L37 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:293735 HCAPLUS

DN 122:57455

TI Low-pressure and low-temperature moldable fiber-reinforced unsaturated polyester composition for molding large articles

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IN Fukuda, Yoshihiro; Yonehara, Haruyuki; Miyashita, Hiromu
 PA Takeda Chemical Industries, Ltd., Japan
 SO Eur. Pat. Appl., 15 pp.
 CODEN: EPXXDW

DT **Patent**
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|--------------|
| PI | EP 598227 | A1 | 19940525 | EP 1993-116753 | 19931016 <-- |
| | R: DE, FR, GB | | | | |
| | JP 06200136 | A2 | 19940719 | JP 1993-260078 | 19931018 <-- |
| | JP 3395985 | B2 | 20030414 | | |
| | US 5447676 | A | 19950905 | US 1993-137978 | 19931019 <-- |
| PRAI | JP 1992-280266 | A | 19921019 | <-- | |
| AB | The title composition curable at 50-120°C, useful for the manufacture of large articles (railroad car parts, automotive exterior parts, etc.), comprises unsatd. polyesters, vinyl monomers, stabilizers, thermoplastic resins, organic peroxides, fluidity modifiers, thickening agents, fillers and fibrous reinforcement material. The composition has good fluidity and filling property when molded at low pressures of 0.1-20 kg/cm ² , and good storage stability at room temperature. A typical composition contained styrene solns. of a dicyclopentadiene-maleic anhydride-propylene glycol-styrene polyester and of a maleic anhydride-neopentyl glycol-propylene glycol-isophthalic acid polyester, and also polystyrene, urethane adipate thermoplastic polymer, tert-amylperoxy-2-ethylhexanoate, di-tert-butylhydroxytoluene, Al hydroxide, finely divided silica, MgO, and glass fiber. | | | | |
| IC | ICM C08L067-06 | | | | |
| CC | 37-6 (Plastics Manufacture and Processing) | | | | |
| ST | polyester unsatd molding low temp curing; molding large article unsatd polyester; storage stability unsatd polyester compn | | | | |
| IT | Glass fibers, uses RL: MOA (Modifier or additive use); POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester composition for molding large articles) | | | | |
| IT | Urethane polymers, uses RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (polyester-, thermoplastic; low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester composition for molding large articles) | | | | |
| IT | Polyesters, uses RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (unsatd., low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester composition for molding large articles) | | | | |
| IT | 106-51-4, p-Benzoquinone, uses 471-34-1, Calcium carbonate , uses 686-31-7, tert-Amylperoxy-2-ethylhexanoate 1309-42-8, Magnesium hydroxide 7631-86-9, Silica, uses 21645-51-2, Aluminum hydroxide, uses 31194-40-8 RL: MOA (Modifier or additive use); POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester composition for molding large articles) | | | | |
| IT | 9003-53-6, Polystyrene RL: POF (Polymer in formulation); TEM (Technical or engineered material | | | | |

use); USES (Uses)

(low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester

composition for molding large articles)

IT 67939-16-6 67939-21-3, Isophthalic acid-Maleic anhydride-Neopentyl glycol-Propylene glycol-Styrene copolymer 102068-90-6

160172-52-1

RL: TEM (Technical or engineered material use); USES (Uses)

(low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester

composition for molding large articles)

IT 160172-52-1

RL: TEM (Technical or engineered material use); USES (Uses)

(low-pressure and low-temperature moldable fiber-reinforced unsatd. polyester

composition for molding large articles)

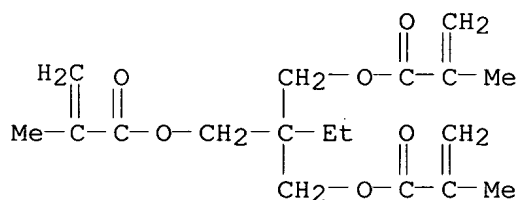
RN 160172-52-1 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 2,2-dimethyl-1,3-propanediol, ethenylbenzene, 2-ethyl-2-[[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl bis(2-methyl-2-propenoate), 2,5-furandione, 1,2-propanediol and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene (9CI) (CA INDEX NAME)

CM 1

CRN 3290-92-4

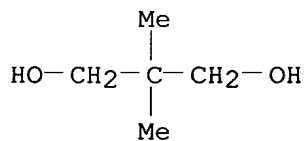
CMF C18 H26 O6



CM 2

CRN 126-30-7

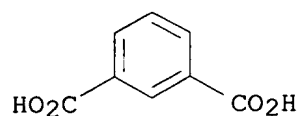
CMF C5 H12 O2



CM 3

CRN 121-91-5

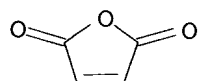
CMF C8 H6 O4



CM 4

CRN 108-31-6

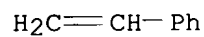
CMF C4 H2 O3



CM 5

CRN 100-42-5

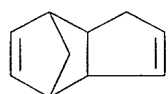
CMF C8 H8



CM 6

CRN 77-73-6

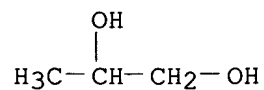
CMF C10 H12



CM 7

CRN 57-55-6

CMF C3 H8 O2



L37 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:268901 HCAPLUS

DN 122:242448

TI Radiation-curable acrylic resin compositions for coatings on poly(vinyl chloride)

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

IN Kayano, Toshiaki; Kitazawa, Seiichi; Hashimoto, Yoshitomi
 PA Dainippon Ink & Chemicals, Japan
 SO Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF

DT **Patent**
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | JP 06279566 | A2 | 19941004 | JP 1993-65200 | 19930324 <-- |
| PRAI | JP 1993-65200 | | 19930324 | <-- | |
| AB | Title coatings, useful on PVC floor coverings and showing shrinkage resistance during curing and good adhesion, contain adducts of poly(alkylene oxide)-modified aromatic epoxy resins and unsatd. monobasic acids and bridge-structure alicyclic (meth)acrylate esters. A mixture of a 309:72 Epiclone 715-acrylic acid reaction product 50, isobornyl acrylate 50, and Darocur 1173 3 parts was coated onto a PVC tile and cured in UV light. | | | | |
| IC | ICM C08G059-17 | | | | |
| | ICS C08G059-17; C08F299-02 | | | | |
| CC | 42-10 (Coatings, Inks, and Related Products) | | | | |
| | Section cross-reference(s): 38 | | | | |
| ST | epoxy acrylate photocuring coating PVC; PVC tile coating epoxy acrylate; isobornyl acrylate photocuring coating PVC; floor tile PVC coating photocuring; shrinkage redn epoxy acrylate photocuring; adhesion coating epoxy acrylate photocuring | | | | |
| IT | Tiles (PVC; photocurable polyoxyalkylene group-containing epoxy acrylate coatings for) | | | | |
| IT | Epoxy resins, uses RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (acrylic, in photocurable coating compns. for PVC floor tiles) | | | | |
| IT | Crosslinking (photochem., of polyoxyalkylene group-containing epoxy acrylate coatings for PVC floor tiles) | | | | |
| IT | Coating materials (photocurable, polyoxyalkylene group-containing epoxy acrylate compns. for PVC floor tiles) | | | | |
| IT | 9002-86-2 RL: MSC (Miscellaneous) (floor tiles; photocurable polyoxyalkylene group-containing epoxy acrylate coatings for) | | | | |
| IT | 162443-64-3P 162443-65-4P 162491-81-8P 162491-82-9P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (in photocurable coating compns. for PVC floor tiles) | | | | |
| IT | 162491-81-8P 162491-82-9P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (in photocurable coating compns. for PVC floor tiles) | | | | |
| RN | 162491-81-8 HCAPLUS | | | | |
| CN | 2-Propenoic acid, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl ester, polymer with Epiclone 715 2-propenoate (9CI) (CA INDEX NAME) | | | | |

CM 1

CRN 162163-84-0

CMF C3 H4 O2 . x Unspecified

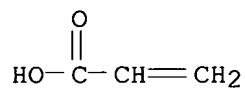
CM 2

CRN 206452-14-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 79-10-7
CMF C3 H4 O2

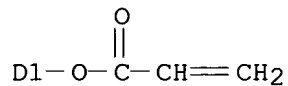
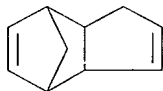


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS

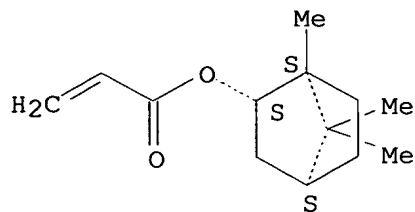


RN 162491-82-9 HCAPLUS
CN 2-Propenoic acid, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl ester,
polymer with Epiclon 715 2-propenoate and exo-1,7,7-
trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



CM 2

CRN 162163-84-0
CMF C3 H4 O2 . x Unspecified

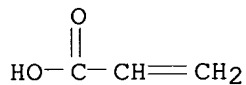
CM 3

CRN 206452-14-4
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 79-10-7
CMF C3 H4 O2

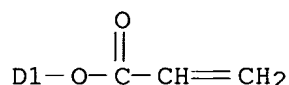
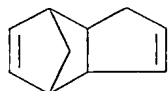


CM 5

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 6

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L37 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1995:213887 HCAPLUS
 DN 122:107570
 TI Thermoplastic graft polymer molding compositions
 IN Fischer, Wolfgang; Guentherberg, Norbert; Niessner, Norbert
 PA BASF A.-G., Germany
 SO Ger. Offen., 6 pp.
 CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-------------------------------|------|----------|-----------------|--------------|
| PI | DE 4237640 | A1 | 19940511 | DE 1992-4237640 | 19921107 |
| | EP 597275 | A1 | 19940518 | EP 1993-116695 | 19931015 <-- |
| | EP 597275 | B1 | 19960424 | | |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | ES 2086175 | T3 | 19960616 | ES 1993-116695 | 19931015 <-- |
| PRAI | DE 1992-4237640 | A | 19921107 | <-- | |

AB Thermoplastic compns. giving moldings with exceptional multiaxial toughness contain graft polymers comprising 30-80% rubbery graft substrates from alkyl acrylates 75-99.8, crosslinking monomers 5-0.1, unsatd. acids 0.1% or dienes ≥50, comonomers ≤50, and unsatd. acids ≤15%; and 70-20% grafted shells containing vinyl aromatic monomers and/or polar comonomers ≤99.9 and hydroxyalkyl (meth)acrylates 0.1-20%. A graft polymer (I) was prepared by emulsion polymerization of Bu acrylate 98, dihydrodicyclopentadienyl acrylate 1, and methacrylic acid 1% to form a substrate which was grafted with a mixture of styrene 75, acrylonitrile 24, and hydroxyethyl acrylate (II) 1%. A 50:50 blend of I with 65:35 SAN gave injection moldings with multiaxial toughness at 0° 40 N-m and 45° gloss 16; vs. 10 and 10, resp., when the graft polymer was prepared with (dimethylamino)ethyl acrylate in place of II.

IC ICM C08F291-02

ICS C08F265-04; C08F279-02; C08L051-00; C08J003-20

ICA C08J003-20

ICI C08F291-02, C08F212-00, C08F220-28; C08L055-02, C08L025-08, C08L027-06, C08L033-06, C08L067-02, C08L069-00, C08L071-10, C08L071-02, C08L077-00, C08L081-02, C08L081-06

CC 37-6 (**Plastics** Manufacture and Processing)

ST blend polymer molding tough; graft polymer blend tough; SAN blend graft polymer; acrylate graft polymer blend; styrene graft polymer blend; methacrylic acid graft polymer; hydroxyethyl acrylate graft polymer

IT Polyamides, properties

Polycarbonates, properties

Polyesters, properties

Polyoxyalkylenes, properties
 Polyoxyphenylenes
 Polysulfones, properties
 Polythiophenylenes
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends; thermoplastic graft polymer molding compns.)

IT Plastics, molded
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (thermoplastic graft polymer molding compns., multiaxially tough)

IT Polyesters, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (**polycarbonate**-, blends; thermoplastic graft polymer molding compns.)

IT **Polycarbonates**, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polyester-, blends; thermoplastic graft polymer molding compns.)

IT Polyketones
 Polysulfones, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polyether-, blends; thermoplastic graft polymer molding compns.)

IT Polyethers, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polyketone-, blends; thermoplastic graft polymer molding compns.)

IT Polyethers, properties
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (polysulfone-, blends; thermoplastic graft polymer molding compns.)

IT 9002-86-2 9003-53-6, Polystyrene 9003-54-7, SAN 9003-56-9, ABS
 9011-14-7, PMMA **160799-93-9** 160799-94-0 **161025-17-8**
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends; thermoplastic graft polymer molding **compns.**)

IT **160799-93-9 161025-17-8**
 RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)
 (blends; thermoplastic graft polymer molding **compns.**)

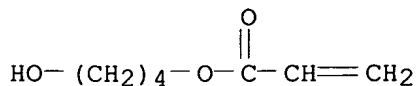
RN 160799-93-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
 ethenylbenzene, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl
 2-propenoate, 4-hydroxybutyl 2-propenoate and 2-propenenitrile, graft
 (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6

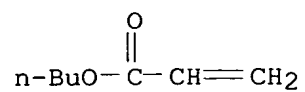
CMF C7 H12 O3



CM 2

CRN 141-32-2

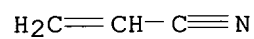
CMF C7 H12 O2



CM 3

CRN 107-13-1

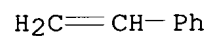
CMF C3 H3 N



CM 4

CRN 100-42-5

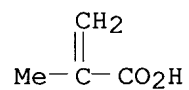
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2



CM 6

CRN 12542-30-2

CMF C13 H16 O2

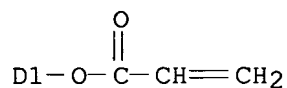
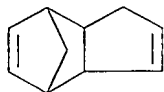
CCI IDS

CM 7

CRN 50976-02-8

CMF C13 H14 O2

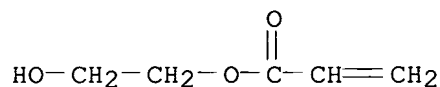
CCI IDS



RN 161025-17-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, 2-hydroxyethyl 2-propenoate and 2-propenenitrile, graft (9CI) (CA INDEX NAME)

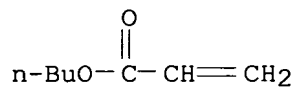
CM 1

CRN 818-61-1
 CMF C5 H8 O3



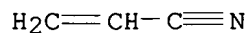
CM 2

CRN 141-32-2
 CMF C7 H12 O2



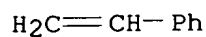
CM 3

CRN 107-13-1
 CMF C3 H3 N



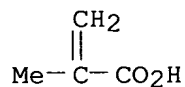
CM 4

CRN 100-42-5
 CMF C8 H8



CM 5

CRN 79-41-4
CMF C4 H6 O2

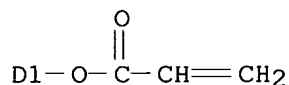
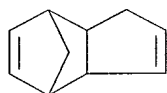


CM 6

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 7

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



L37 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1995:85665 HCAPLUS

DN 122:32905

TI Weathering-resistant thermoplastic molding compositions containing graft polymers

IN Fischer, Wolfgang; Deckers, Andreas; Guentherberg, Norbert; Niessner, Norbert

PA BASF A.-G., Germany

SO Ger. Offen., 7 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|--------------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | DE 4234296 | A1 | 19940414 | DE 1992-4234296 | 19921012 |
| | EP 592953 | A1 | 19940420 | EP 1993-116281 | 19931008 <-- |

EP 592953 B1 19970108
 R: BE, DE, ES, FR, GB, IT, NL
 ES 2096831 T3 19970316 ES 1993-116281 19931008 <--
 PRAI DE 1992-4234296 A 19921012 <--
 AB Nonyellowing molding compns. resisting impact contain graft polymers prepared by grafting rubberlike polymers from alkyl acrylates 75-99.8, crosslinking monomers 0.1-5, unsatd. acids 0.1-20 or dienes $\geq 50\%$ and, optionally comonomers with mixts. of styrene derivs. 1-99.9, polar comonomers 0-99.9, and unsatd. bases 0.1-20%. K2S2O8-initiated polymerization of 560 g 98:2 mixture of styrene and (dimethylamino)ethyl acrylate on 2100 g 10% latex of 97:1:2 Bu acrylate-dihydrodicyclopentadienyl acrylate-methacrylic acid copolymer gave a graft polymer (I). A 50:50 blend of I and polystyrene had 45° gloss 10 and yellowness index 6 and 10, resp., before and after aging at 110°.

IC ICM C08F291-02
 ICS C08F279-02; C08F265-02; C08F291-12; C08F291-06; C08L051-00
 ICA C08J003-20; F21V003-04; A63H033-00; E06B001-26
 ICI C08L025-04, C08L033-10, C08L055-02, C08L067-02, C08L069-00, C08L071-02, C08L071-10, C08L077-00, C08L081-02, C08L081-06
 CC 37-6 (**Plastics** Manufacture and Processing)
 ST blend polymer yellowing resistance; graft polymer blend nonyellowing; polystyrene blend graft polymer weathering resistance; styrene graft polymer blend weathering resistance; acrylate graft polymer blend weathering resistance; methacrylic acid graft polymer weathering resistance; methylaminoethyl acrylate graft polymer weathering resistance

IT Polyamides, uses
Polycarbonates, uses
 Polyesters, uses
 Polyoxyalkylenes, uses
 Polyoxyphenylenes
 Polysulfones, uses
 Polythioarylenes
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Polyesters, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (~~polycarbonate~~-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT **Polycarbonates**, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (polyester-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Polyketones
 Polysulfones, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (polyether-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Polyethers, uses
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (polyketone-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Polyethers, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (polysulfone-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Plastics, molded
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (thermo-, yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT Polymer degradation
 (weathering, weathering-resistant thermoplastic molding compns. containing graft polymers)

IT 9002-86-2 9003-53-6 9003-56-9 9011-14-7 **156558-91-7**
159821-69-9
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

IT **156558-91-7 159821-69-9**
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (yellowing-resistant; weathering-resistant thermoplastic molding compns. containing graft polymers)

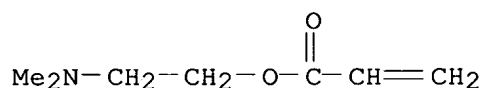
RN 156558-91-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-propenoate, ethenylbenzene and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2439-35-2

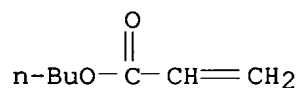
CMF C7 H13 N O2



CM 2

CRN 141-32-2

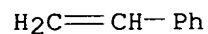
CMF C7 H12 O2



CM 3

CRN 100-42-5

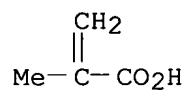
CMF C8 H8



CM 4

CRN 79-41-4

CMF C4 H6 O2



CM 5

CRN 12542-30-2

CMF C13 H16 O2

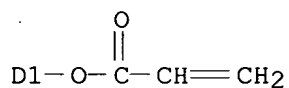
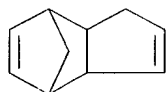
CCI IDS

CM 6

CRN 50976-02-8

CMF C13 H14 O2

CCI IDS



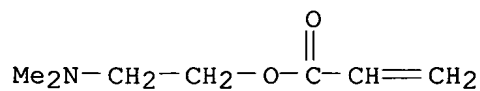
RN 159821-69-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-propenoate, 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate and methyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

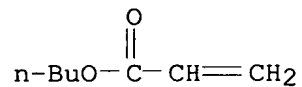
CRN 2439-35-2

CMF C7 H13 N O2



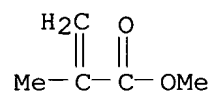
CM 2

CRN 141-32-2
CMF C7 H12 O2



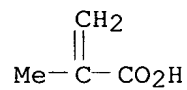
CM 3

CRN 80-62-6
CMF C5 H8 O2



CM 4

CRN 79-41-4
CMF C4 H6 O2

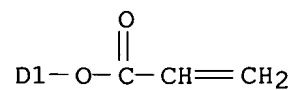
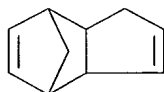


CM 5

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

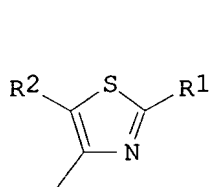
CM 6

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS

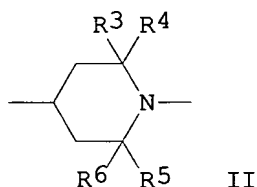


L37 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:410979 HCAPLUS
 DN 121:10979
 TI Stabilized polyurethane compositions and their fibers
 IN Oshita, Tatsuya; Ishiguro, Michihiro
 PA Kuraray Co, Japan
 SO Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DT **Patent**
 LA Japanese
 FAN.CNT 1

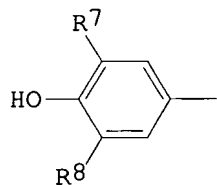
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | JP 05320500 | A2 | 19931203 | JP 1992-150109 | 19920519 <-- |
| PRAI | JP 1992-150109 | | 19920519 | <-- | |
| GI | | | | | |



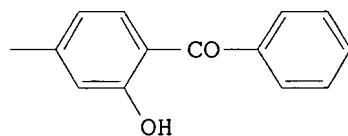
I



II



III



IV

AB The title compns., with good fungicidal properties and resistance to light, nitrogen **oxides**, weather, heat discoloration, and solvents, contain ≥ 1 4-thiazolyl-containing compound I (R1, R2 = H, alkyl, halogen), hindered amines with mol. weight ≥ 1000 having ≥ 1 piperidine ring II (R3-R6 = alkyl), hindered phenols with mol. weight ≥ 500 having ≥ 1 dialkylhydroxyphenyl group III (R7, R8 = alkyl), and optionally benzophenones with mol. weight $\geq 10,000$ having ≥ 1 benzoylhydroxyphenyl group IV. Polyurethane fibers obtained from the above compns. are also claimed. Thus, adipic acid-1,4-butanediol copolymer diol (number-average mol. weight 2000), MDI, and 1,4-butanediol were melt

polymerized at 1:4.1:3.0 (mol ratio), forming the binder.

IC ICM C08L075-04

ICS C08K005-13; C08K005-3435; C08K005-46; D01F006-94

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): **38**, 40

ST polyurethane film thiazolyl compd fungicide; hindered amine stabilizer polyurethane film; phenol hindered stabilizer polyurethane; benzophenone stabilizer polyurethane; fiber polyurethane stabilizer thiazolyl compd

IT Discoloration prevention

(of polyurethane films and fibers, by stabilizers composed of hindered amines and phenols and benzophenones)

IT Fungicides and Fungistats
(thiazolyl-containing compds., for polyurethane films and fibers)

IT Light stabilizers
(thiazolyl-containing fungicides and, hindered amines and phenols and benzophenones, for polyurethane films and fibers)

IT Phenols, uses
RL: USES (Uses)
(alkyl, stabilizers, for polyurethane films and fibers)

IT Amines, uses
RL: USES (Uses)
(hindered, piperidine ring-containing, stabilizers for polyurethane films and fibers)

IT Urethane polymers, uses
RL: USES (Uses)
(polyester-, films, containing thiazolyl-containing fungicides and hindered amine and phenols and benzophenones, with good resistance to light and nitrogen **oxides**)

IT Urethane polymers, preparation
RL: PREP (Preparation)
(polyester-, fiber, preparation of, containing thiazolyl-containing fungicides and hindered amines and phenols and benzophenones, with good resistance to light and nitrogen **oxides**)

IT Synthetic fibers, polymeric
RL: PREP (Preparation)
(polyester-polyurethanes, preparation of, containing thiazolyl-containing fungicides and hindered amines and phenols and benzophenones, with good resistance to light and nitrogen **oxides**)

IT Polyester fibers, preparation
RL: PREP (Preparation)
(polyurethane-, preparation of, containing thiazolyl-containing fungicides and hindered amines and phenols and benzophenones, with good resistance to light and nitrogen **oxides**)

IT 148-79-8
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(fungicides, polyurethane compns. containing, for films and fibers)

IT 6683-19-8 **25189-68-8** 65447-77-0 90498-88-7
RL: USES (Uses)
(polyurethane **compns.** containing, with thiazolyl-containing fungicides, for good resistance to light and nitrogen **oxides** and discoloration and solvents)

IT 94189-49-8P, Adipic acid-1,4-butanediol-mdi block copolymer 103358-63-0P
RL: PREP (Preparation)
(preparation of, compns., containing thiazolyl-containing fungicides and hindered amines and phenols and benzophenones, for films and fibers)

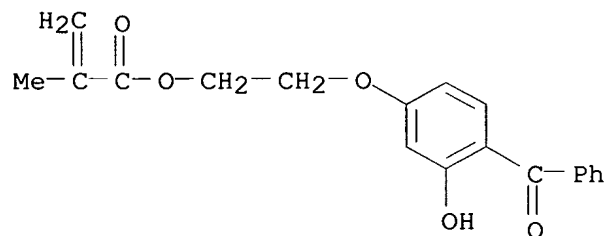
IT 10102-44-0, Nitrogen dioxide, miscellaneous
RL: MSC (Miscellaneous)
(resistance to, of polyurethane films and fibers, containing hindered amines and phenols and benzophenones)

IT **25189-68-8**
RL: USES (Uses)
(polyurethane **compns.** containing, with thiazolyl-containing fungicides, for good resistance to light and nitrogen **oxides** and discoloration and solvents)

RN 25189-68-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester,
 polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

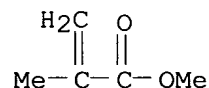
CM 1

CRN 16613-04-0
 CMF C19 H18 O5



CM 2

CRN 80-62-6
 CMF C5 H8 O2

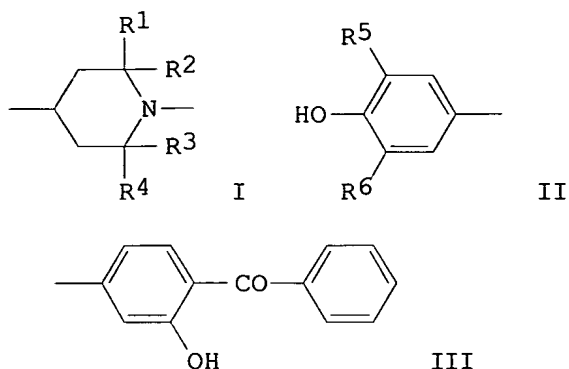


L37 ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 1994:325034 HCAPLUS
 DN 120:325034
 TI Polyurethane compositions and fibers
 IN Ishiguro, Michihiro; Oshita, Tatsuya; Yamashita, Sadao; Hirai, Koji
 PA Kuraray Co, Japan
 SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF

DT **Patent**
 LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| | ----- | ---- | ----- | ----- | ----- |
| PI | JP 05320499 | A2 | 19931203 | JP 1992-150108 | 19920519 <-- |
| | JP 3256574 | B2 | 20020212 | | |
| PRAI | JP 1992-150108 | | 19920519 | <-- | |
| GI | | | | | |



- AB Polyurethane compns. with good resistance to light, N **oxides**, weather, heat discoloration, and solvents contain hindered amines with mol. weight ≥ 1000 having ≥ 1 piperidine ring I (R1-R4 = alkyl), hindered phenols with mol. weight ≥ 500 having ≥ 1 dialkylhydroxyphenyl group II (R5, R6 = alkyl), and benzophenones with mol. weight $\geq 10,000$ having ≥ 1 benzoylhydroxyphenyl group III. Polyurethane fibers manufactured from the above compns. are also claimed. Thus, 1:4.1:3 (mol ratio) polyester diol (average mol. weight 2000; obtained from 1,4-butanediol and adipic acid), MDI, and 1,4-butanediol were melt polymerized to give polyurethane pellets, which were mixed with 0.5% di-Me succinate-1-(2-hydroxyethyl)-4-hydroxy-2,2,6,6-tetramethylpiperidine polycondensate with number-average mol. weight 3400, 0.5% 3,9-bis[2-[3-(3-tert-butyl-4-hydroxy-5-methylphenyl)propionyloxy]-1,1-dimethylethyl]-2,4,8,10-tetraoxaspiro[5.5]undecane, and 0.3% 50:50 (mol ratio) 2-hydroxy-4-(methacryloyloxyethoxy)benzophenone-Me methacrylate copolymer (average mol. weight 30,000) to give a composition, which was hot-pressed to give a 0.1-mm film, which showed good resistance to light, weather, solvents, and NO₂.
- IC ICM C08L075-04
ICS C08K005-13; C08K005-3435; D01F006-94
- CC 37-6 (**Plastics** Manufacture and Processing)
Section cross-reference(s): 40
- ST polyurethane compn stabilizer; hindered amine stabilizer polyurethane compn; phenol hindered stabilizer polyurethane compn; benzophenone stabilizer polyurethane compn; nitrogen **oxide** resistance polyurethane compn; fiber polyurethane stabilizer
- IT Stabilizing agents
(hindered amines and hindered phenols and benzophenones, for polyurethane compns., for films and fibers)
- IT Discoloration prevention
(of polyurethane compns., by stabilizers composed of hindered amines and hindered phenols and benzophenones, for films and fibers)
- IT Amines, uses
RL: USES (Uses)
(piperidine ring-containing, hindered, stabilizers, for polyurethane compns., for films and fibers)
- IT Phenols, uses
RL: USES (Uses)
(stabilizers, for polyurethane compns., for films and fibers)

IT Urethane polymers, preparation
 RL: PREP (Preparation)
 (polyester-, preparation of, films, containing hindered amines and hindered phenols and benzophenones, with good resistance to light and nitrogen oxides and weather)

IT Urethane polymers, miscellaneous
 RL: MSC (Miscellaneous)
 (polyester-, fiber, stabilizers for, hindered amines and hindered phenols and benzophenones as, for good resistance to light and nitrogen oxides)

IT Synthetic fibers, polymeric
 RL: MSC (Miscellaneous)
 (polyester-polyurethanes, stabilizers for, hindered amines and hindered phenols and benzophenones as, for good resistance to light and nitrogen oxides)

IT Polyester fibers, miscellaneous
 RL: MSC (Miscellaneous)
 (polyurethane-, stabilizers for, hindered amines and hindered phenols and benzophenones as, for good resistance to light and nitrogen oxides)

IT 94189-49-8P, Adipic acid-1,4-butanediol-MDI block copolymer 122083-88-9P
 RL: PREP (Preparation)
 (preparation of, films, containing hindered amines and hindered phenols and benzophenones, with good resistance to light and nitrogen oxides and weather)

IT 10102-44-0, Nitrogen dioxide, properties
 RL: PRP (Properties)
 (resistance to, of polyurethane compns. containing hindered amines and hindered phenols and benzophenones)

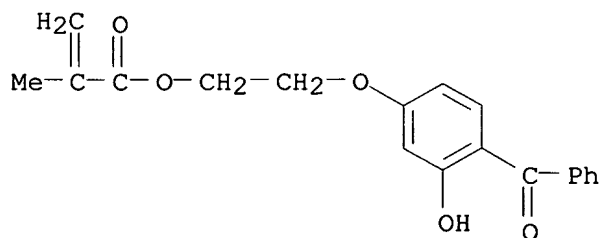
IT 6683-19-8 **25189-68-8** 65447-77-0 90498-88-7
 RL: USES (Uses)
 (stabilizers, polyurethane compns. containing, for films and fibers)

IT **25189-68-8**
 RL: USES (Uses)
 (stabilizers, polyurethane compns. containing, for films and fibers)

RN 25189-68-8 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

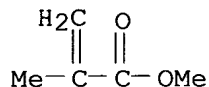
CRN 16613-04-0
 CMF C19 H18 O5



CM 2

CRN 80-62-6

CMF C5 H8 O2



L37 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1992:534587 HCAPLUS

DN 117:134587

TI Paraffin-based heat-storage compositions

IN Momose, Chiaki; Nakakawara, Kiyoshi; Hayashi, Yuichi

PA Mitsubishi Densen Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

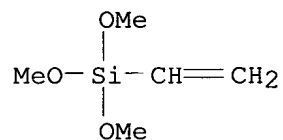
DT **Patent**

LA Japanese

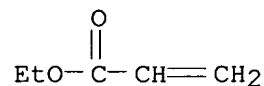
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | JP 04072381 | A2 | 19920306 | JP 1990-186679 | 19900712 <-- |
| | JP 2826765 | B2 | 19981118 | | |
| PRAI | JP 1990-186679 | | 19900712 | <-- | |
| AB | The compns. products prepared from paraffin- and hydrocarbon polymer binder-based materials by crosslinking and foaming. The compns. are flexible and are useful for seat cushions, floor heating systems, etc. | | | | |
| IC | ICM C09K005-06 | | | | |
| CC | 52-3 (Electrochemical , Radiational, and Thermal Energy Technology) | | | | |
| | Section cross-reference(s): 39 | | | | |
| ST | heat storage crosslinked paraffin foam; rubber paraffin crosslinked heat storage | | | | |
| IT | Paraffin waxes and Hydrocarbon waxes, uses | | | | |
| | RL: USES (Uses) | | | | |
| | (heat storage compns., containing polymer binders, crosslinked and foamed) | | | | |
| IT | Heat | | | | |
| | (storage of, paraffin-based compns. containing hydrocarbon polymers for) | | | | |
| IT | Rubber, natural, uses | | | | |
| | RL: USES (Uses) | | | | |
| | (vulcanized and foamed, heat-storage compns. containing, paraffin-based) | | | | |
| IT | Rubber, synthetic | | | | |
| | RL: USES (Uses) | | | | |
| | (dicyclopentadiene-ethylene-propene, vulcanized and foamed, heat-storage compns. containing, paraffin-based, Esprene 301) | | | | |
| IT | Alkanes, uses | | | | |
| | RL: USES (Uses) | | | | |
| | (fluoro, foaming agent, for paraffin-based heat-storage material manufacture) | | | | |
| IT | 77-58-7, Dibutyltin dilaurate 80-43-3, Dicumyl peroxide | | | | |
| | RL: CAT (Catalyst use); USES (Uses) | | | | |
| | (crosslinking catalyst, in paraffin-based heat-storage foam manufacture) | | | | |
| IT | 80-51-3, p,p'-Oxybis(benzenesulfonyl hydrazide) 123-77-3, Azodicarbonamide | | | | |
| | RL: USES (Uses) | | | | |

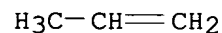
(foaming agent, for paraffin-based heat-storage material manufacture)
 IT 143409-97-6 143409-98-7 **143409-99-8 143410-00-8**
 RL: USES (Uses)
 (heat-storage **compns.** containing, paraffin-based)
 IT 25034-71-3, Dicyclopentadiene-ethylene-propene copolymer
 RL: USES (Uses)
 (rubber, vulcanized and foamed, heat-storage compns. containing,
 paraffin-based)
 IT 120-78-5, Dibenzothiazyl disulfide **1314-13-2**, Zinc **oxide**
 , uses
 RL: USES (Uses)
 (vulcanizing agent, in paraffin-based heat-storage foam manufacture)
 IT **143409-99-8 143410-00-8**
 RL: USES (Uses)
 (heat-storage **compns.** containing, paraffin-based)
 RN 143409-99-8 HCAPLUS
 CN 2-Propenoic acid, ethyl ester, polymer with ethene,
 ethenyltrimethoxysilane, 1-propene and 3a,4,7,7a-tetrahydro-4,7-methano-1H-
 indene (9CI) (CA INDEX NAME)
 CM 1
 CRN 2768-02-7
 CMF C5 H12 O3 Si



CM 2
 CRN 140-88-5
 CMF C5 H8 O2

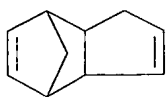


CM 3
 CRN 115-07-1
 CMF C3 H6



CM 4
 CRN 77-73-6

CMF C10 H12



CM 5

CRN 74-85-1

CMF C2 H4

H₂C=CH₂

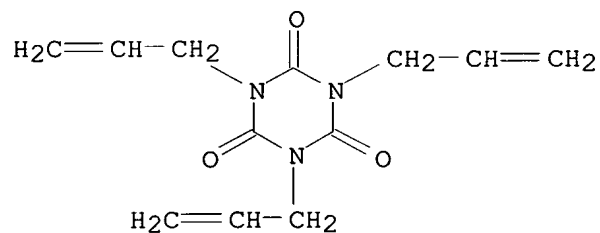
RN 143410-00-8 HCAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with ethene, 1-propene, 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene and 1,3,5-tri-2-propenyl-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 1025-15-6

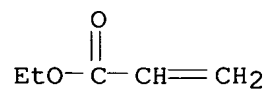
CMF C12 H15 N3 O3



CM 2

CRN 140-88-5

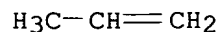
CMF C5 H8 O2



CM 3

CRN 115-07-1

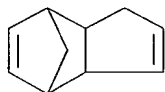
CMF C3 H6



CM 4

CRN 77-73-6

CMF C10 H12



CM 5

CRN 74-85-1

CMF C2 H4



IT 1314-13-2, Zinc **oxide**, uses

RL: USES (Uses)

(vulcanizing agent, in paraffin-based heat-storage foam manufacture)

RN 1314-13-2 HCAPLUS

CN Zinc oxide (ZnO) (9CI) (CA INDEX NAME)



L37 ANSWER 47 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1991:560615 HCAPLUS

DN 115:160615

TI Low-temperature-resistant thermoplastic molding compositions and their use

IN Neumann, Rainer; Baumgartner, Ehrenfried; Benker, Klaus; Ruppmich, Karl

PA BASF A.-G., Germany

SO Ger. Offen., 8 pp.

CODEN: GWXXBX

DT **Patent**

LA German

FAN.CNT 1

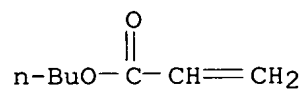
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|--------------|
| PI | DE 3939046 | A1 | 19910529 | DE 1989-3939046 | 19891125 |
| | EP 429957 | A2 | 19910605 | EP 1990-121790 | 19901114 <-- |
| | EP 429957 | A3 | 19911016 | | |
| | EP 429957 | B1 | 19950517 | | |
| | R: BE, DE, ES, FR, GB, IT, NL | | | | |
| | US 5162423 | A | 19921110 | US 1990-613014 | 19901115 <-- |
| PRAI | DE 1989-3939046 | A | 19891125 | <-- | |
| AB | The title compns. contain polycarbonate 20-80, thermoplastic copolymer 10-60, graft polymer A 5-30, and graft polymer B 5-30%. The | | | | |

thermoplastic copolymer is based on 70-90% styrene, α -methylstyrene, or ring-alkylated styrene and 10-30% (meth)acrylonitrile. Graft polymer A is based on 20-60% polybutadiene rubber and 40-80% combination of styrene and (meth)acrylonitrile [(10-90):(10-30)] or a combination of styrene, Me methacrylate, and glycidyl methacrylate [(15-40):(60-85):(0-3)]. Graft polymer B is based on 20-60% acrylic rubber and 40-80% mixture of styrene and (meth)acrylonitrile [(70-90):(10-30)]. Graft polymer A has particle size 0.2-0.5 μm and graft polymer B has particle size 0.4-0.7 μm . Thus, a composition of bisphenol A **polycarbonate** 60, styrene-acrylonitrile copolymer 20, butadiene-acrylonitrile-Et acrylate-methacrylamide-styrene graft copolymer 10, and Bu acrylate-tricyclodecenyl acrylate-acrylonitrile-styrene graft copolymer (particle size 0.5 μm) 10 parts had notched impact resistance 34 and 27 kJ/m² at -20 and -40°, resp. Using a second graft copolymer of particle size 0.09 μm instead of 0.5 μm gave a product with resp. impact resistance 21 and 4 kJ/m².

- IC ICM C08L069-00
ICS C08L025-02; C08L055-02; C08L051-04; C08L051-06
ICI C08L025-02, C08L025-12, C08L025-16, C08L033-20
CC 37-6 (**Plastics** Manufacture and Processing)
Section cross-reference(s): **38**
ST **polycarbonate** graft polymer blend; thermoplastic impact resistance low temp
IT Particle size
(of graft polymers in **polycarbonate** molding compns., low-temperature impact resistance in relation to)
IT **Polycarbonates**, uses and miscellaneous
RL: USES (Uses)
(thermoplastic molding compns. containing graft polymers and, with low-temperature impact resistance)
IT 136297-56-8, Acrylonitrile-butadiene-ethyl acrylate-methacrylamide-styrene graft copolymer 136297-57-9, Butadiene-glycidyl methacrylate-methyl methacrylate-styrene graft copolymer
RL: USES (Uses)
(molding compns. containing **polycarbonates** and, with low-temperature impact resistance)
IT 9003-54-7, Acrylonitrile-styrene copolymer
RL: USES (Uses)
(molding compns., containing **polycarbonates** and graft polymers, with low-temperature impact resistance)
IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: USES (Uses)
(**polycarbonate** molding compns. containing, low-temperature impact-resistant, particle size in relation to)
IT 24936-68-3, Bisphenol A **polycarbonate**, sru, uses and miscellaneous 25037-45-0, Bisphenol A-carbonic acid copolymer
RL: USES (Uses)
(thermoplastic molding compns. containing graft polymers and, with low-temperature impact resistance)
IT **106912-44-1**, Acrylonitrile-butyl acrylate-styrene-tricyclodecenyl acrylate graft copolymer
RL: USES (Uses)
(**polycarbonate** molding compns. containing, low-temperature impact-resistant, particle size in relation to)
RN 106912-44-1 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene, 2-propenenitrile and 3a,4,7,7a,?,?-hexahydro-4,7-methano-1H-indenyl 2-propenoate, graft (9CI) (CA INDEX NAME)

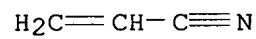
CM 1

CRN 141-32-2
CMF C7 H12 O2



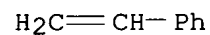
CM 2

CRN 107-13-1
CMF C3 H3 N



CM 3

CRN 100-42-5
CMF C8 H8

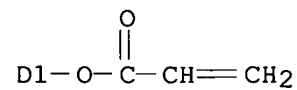
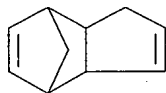


CM 4

CRN 12542-30-2
CMF C13 H16 O2
CCI IDS

CM 5

CRN 50976-02-8
CMF C13 H14 O2
CCI IDS



AN 1983:55260 HCAPLUS

DN 98:55260

TI Engineering thermoplastic of a diol bis(allyl **carbonate**) and a copolymer of an acrylate of a cycloalkadiene

IN Schwarz, Richard A.

PA PPG Industries, Inc. , USA

SO U.S., 7 pp.

CODEN: USXXAM

DT **Patent**

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|--------------|
| PI | US 4360637 | A | 19821123 | US 1981-330425 | 19811214 <-- |
| PRAI | US 1981-330425 | | 19811214 | <-- | |

AB Thermosetting molding **compns.** contain diol bis(allyl **carbonates**) and cycloalkadienyl acrylate-vinyl compound copolymers. Thus, a CH₂Cl₂ solution of 6 g 85:15 Me methacrylate-3a,4,5,6,7,7a-hexahydro-4,7-methanoinden-5(or 6)-yl acrylate copolymer [84413-84-3] (intrinsic viscosity 0.565 dL/g) 6, diethylene glycol bis(allyl **carbonate**) 34, and Bz2O2 1.02 g was evaporated and the residue was cured as a 3-mm sheet for 18 h at 63-100° to give a sheet with Barcol hardness 26-34, haze 4.3, light transmission 91.2%, and yellowness index 8.7%.

IC C08F263-00

NCL 525277000

CC 38-3 (**Plastics** Fabrication and Uses)ST blend plastic transparency; allyl **carbonate** polymer blend; dicyclopentadiene acrylate copolymer blend; methacrylate copolymer blendIT **Plastics**, molded

RL: USES (Uses)

(acrylate polymer-allyl **carbonate** polymer blends, with good optical properties)

IT 25656-90-0

RL: USES (Uses)

(blends with dicyclopentadiene acrylate polymers, with good optical properties)

IT 90077-84-2

RL: USES (Uses)

(blends with diethylene glycol bis(allyl **carbonate**) polymer, with good optical properties)

L37 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1978:406867 HCAPLUS

DN 89:6867

TI UV-absorbing polymers for protecting the human body

AU Jacquet, B.; Mahieu, C.; Papantoniou, C.

CS Lab. Rech., Soc. Oreal, Paris, Fr.

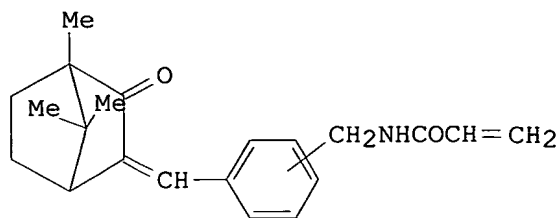
SO Revue Generale des Caoutchoucs & Plastiques (1977), 54(575), 85-8

CODEN: RCPLA5; ISSN: 0035-3175

DT Journal

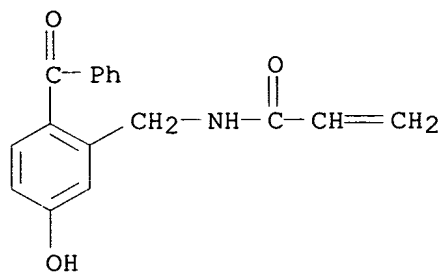
LA French

GI

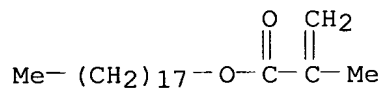


- AB Polymers for use in the manufacture of suntanning compns. were prepared by reaction of vinyl chloroacetate (I) polymers with salts of UV-absorbing compds. or by polymerization of acryloyl group-containing UV-absorbing compds., optionally with comonomers. For example, reaction of I-vinyl stearate copolymer with 4-(dimethylamino)benzoic acid gave 90% product with λ_{\max} 311 nm, and polymerization of acrylamide derivative I [66507-42-4] with [2-(methacryloyloxy)ethyl]trimethylammonium methosulfate gave copolymer [66547-38-4] with λ_{\max} 295 nm. The polymers were more stable to UV light in solution than were low-mol.-weight UV-absorbing compds.
- CC 36-3 (**Plastics** Manufacture and Processing)
Section cross-reference(s): 63
- ST UV absorbing polymer; suntanning compn sunscreen polymer; aminobenzoic modified polymer sunscreen; benzylidenbornanone deriv copolymer sunscreen; acrylamide deriv polymer sunscreen; vinyl chloroacetate polymer sunscreen
- IT Sunburn and Suntan
(UV-absorbing polymers for protection from)
- IT 59941-56-9P 66506-46-5P 66506-47-6P 66547-37-3P 66547-38-4P
66559-84-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(UV absorbing, preparation of, for suntanning **composition**)
- IT 56-91-7DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 93-35-6DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 530-78-9DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 610-16-2DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 619-84-1DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 830-09-1DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 1137-42-4DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 2440-22-4DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer 10380-41-3DP, reaction products with vinyl chloroacetate-vinyl stearate copolymer
RL: SPN (Synthetic preparation); PREP (Preparation)
(UV-absorbing, preparation of, for suntanning compns.)
- IT 20952-85-6P 55510-45-7P 66506-41-0P 66506-42-1P 66507-41-3P
66507-42-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
- IT 24991-33-1DP, reaction products with UV absorbing compds. 31291-80-2DP, reaction products with UV absorbing compds.
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for suntanning compns.)
- IT 924-42-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with UV-absorbing compds.)
- IT 131-57-7 948-65-2 1076-38-6 1137-42-4 2440-22-4 15087-24-8
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with methylolacrylamide)
 IT **66559-84-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (UV absorbing, preparation of, for suntanning **composition**)
 RN 66559-84-0 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with
 N-[(2-benzoyl-5-hydroxyphenyl)methyl]-2-propenamide (9CI) (CA INDEX NAME)
 CM 1
 CRN 66506-41-0
 CMF C17 H15 N O3



CM 2
 CRN 32360-05-7
 CMF C22 H42 O2



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